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**REQUEST FOR PRICE AND
AVAILABILITY
DEMANDE DE PRIX ET DE
DISPONIBILITÉ**

This is not a bid solicitation but an inquiry for the purpose of obtaining price and availability information for the goods, services, and construction specified herein. The information requested herein is for budgeting and planning purposes only. Contracts will not be entered into on the basis of suppliers' responses.

Il ne s'agit pas d'une invitation à soumissionner mais d'une demande de renseignements sur les prix et la disponibilité des biens, services et construction spécifiés aux présentes. Les renseignements demandés aux présentes sont nécessaires uniquement à l'établissement du budget et à la planification. Les marchés ne seront pas attribués suite aux réponses des fournisseurs/entrepreneurs.

Comments - Commentaires

Title - Sujet High Risk Search - ROVs	
Solicitation No. - N° de l'invitation W8476-175508/A	Date 2016-11-01
Client Reference No. - N° de référence du client W8476-175508	GETS Ref. No. - N° de réf. de SEAG PW-\$\$QF-030-26039
File No. - N° de dossier 030qf.W8476-175508	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2016-12-15	
Time Zone Fuseau horaire Eastern Standard Time EST	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Hamilton, Indra	Buyer Id - Id de l'acheteur 030qf
Telephone No. - N° de téléphone (819) 420-1738 ()	FAX No. - N° de FAX (819) 956-5650
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Specified Herein Précisé dans les présentes	

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution

Electronics, Simulators and Defence Systems Div.
/Division des systèmes électroniques et des systèmes de
simulation et de défense

11 Laurier St. / 11, rue Laurier

8C2, Place du Portage

Gatineau

Québec

K1A 0S5

Delivery Required - Livraison exigée See Herein	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

Background and Request for Information

HRS-ROV Statement of Work

W8476-175508

This is a part of the High Risk Search Capability Project-HRSCs

High Risk Search Remotely Operated Vehicle System

The Department of National Defence has a capital equipment requirement under project High Risk Search Capability, currently in the Definition Phase. The Statements of Work (SOW) and technical specifications for the equipment are completed as drafts with an expectation to finalize the drafts after receiving feedback from Industry during the Price and Availability (P&A) request process. The SOWs and technical documents will be amended as required to incorporate any useful information from Industry.

Aim:

The Department of National Defence, through this P&A process, is seeking price and availability of deliverables as outlined in the SOW and associated technical documents. The cost and availability information is required in order to move into the approval process, which is a prerequisite to Implementation.

Additionally, the Department of National Defence is requesting costing information for the Integrated Logistic Support (ILS) deliverables, as defined within the SOW.

The costs for both the capital procurement and proposed ILS portion will be used to solidify the proposed project budget. Pricing obtained from Industry through this P&A process must be recent and accurate data.

The following would also be desirable as part of this P&A:

1. Quote provided on company letterhead.
2. Brief background information on the company and its typical clients.
3. Brief background information on the proposed product(s) that meets the technical requirements of the SOW.

4. Include the completed Estimated Cost Table, as described in this document, and if possible provide a few more technical and costing details to explain cost origins for the equipment, spares (if required), and training session(s).
5. For any items priced in foreign currency, please provide the exchange rate used to calculate the CAD price.

Questions and requests for clarifications received by close of business Thursday are expected to be answered and provided to Industry the following Monday.

Contact Information:

Indra Hamilton

Contracting Authority

Division des systèmes électroniques et des systèmes de simulation et de défense |
Electronics, Simulators and Defence Systems Division

Secteur de l'approvisionnement et du soutien en équipement aérospatial et terrestre |
Land and Air Equipment Procurement and Support Sector

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STATEMENT OF WORK
FOR HIGH RISK SEARCH
REMOTELY OPERATED VEHICLES

TABLE OF CONTENTS

1.0 SCOPE5

1.1 Purpose 5

1.2 Background 5

1.3 Intended Use 5

1.4 Acronyms and Abbreviations 5

2.0 APPLICABLE DOCUMENTS8

2.1 References 8

2.2 Order of Precedence 9

3.0 PROJECT MANAGEMENT10

3.1 Project Management Program 10

3.2 Project Management Plan (PMP) 10

3.3 Project Meetings 10

4.0 INTEGRATED LOGISTICS SUPPORT (ILS).....12

4.1 Maintenance Concept 12

4.2 Technical Publication Package 12

4.3 Provisioning Documentation..... 13

4.4 Initial Provisioning Guidance Conference..... 14

4.5 Initial Provisioning Conference 14

4.6 Initial Training Sessions 14

4.7 Identification Plates 15

4.8 Controlled Goods List..... 16

4.9 Decals and Data Plates..... 16

4.10 Packaging, Labels and Codes 16

4.11 Repair and Overhaul Plan..... 16

4.12 Application for Spectrum Supportability 16

4.13 Data Deliverable Format 17

5.0 ENVIRONMENTAL HEALTH AND SAFETY18

5.1 General 18

5.2 Environmental Management System..... 18

5.3 EHS Packaging Labels and MSDS 18

6.0 TECHNICAL REQUIREMENTS.....	20
6.1 Overview	20
A1.0 APPENDIX: HRS-ROV - SMALL ROV SYSTEM - PERFORMANCE SPECIFICATION.....	21
A1.1 System Requirements.....	21
A1.2 System Component Requirements	22
A1.3 Physical Requirements	24
A1.4 Environmental/Climatic Requirements	24
A2.0 APPENDIX: HRS-ROV - LARGE ROV SYSTEM - PERFORMANCE SPECIFICATION.....	26
A2.1 System Requirements.....	26
A2.2 System Component Requirements	27
A2.3 Physical Requirements	30
A2.4 Environmental/Climatic Requirements	31
A3.0 APPENDIX: CONTRACT DATA REQUIREMENTS LIST	32
A3.1 CDRL Item List.....	32
A3.2 CDRL Table Definitions	33
A3.3 CDRL – Project Management Plan	36
A3.4 CDRL – Meeting Agenda	37
A3.5 CDRL – Meeting Minutes.....	38
A3.6 CDRL – Operator Manuals.....	39
A3.7 CDRL – Initial Training Package	40
A3.8 CDRL – Illustrated Parts Manual.....	41
A3.9 CDRL – Provisioning Parts Breakdown	42
A3.10 CDRL – Supplementary Provisioning Technical Documentation	43
A3.11 CDRL – Special Tools and Test Equipment.....	44
A3.12 CDRL – Identification Plates	45
A3.13 CDRL – Controlled Goods List.....	46
A3.14 CDRL – Packaging Labels and Codes.....	47
A3.15 CDRL – Repair & Overhaul Plan.....	48
A3.16 CDRL – Repair Manual.....	49
A3.17 CDRL - Quick Reference Cards.....	50

A3.18	CDRL – Top Level Assembly Drawing	51
A3.19	CDRL – Decals and Data Plates	52
A3.20	CDRL – Application for Spectrum Supportability.....	53
A4.0	APPENDIX: DATA ITEM DESCRIPTION	54
A4.1	DID Item List	54
A4.2	DID Table Definitions	55
A4.3	DID – Project Management Plan.....	56
A4.4	DID – Meeting Agenda.....	57
A4.5	DID – Meeting Minutes	58
A4.6	DID – Operator Manuals	59
A4.7	DID – Initial Training Package.....	61
A4.8	DID – Illustrated Parts Manual	63
A4.9	DID – Provisioning Parts Breakdown	65
A4.10	DID – Supplementary Provisioning Technical Documentation	66
A4.11	DID – Special Tools and Test Equipment	67
A4.12	DID – Identification Plates.....	69
A4.13	DID – Controlled Goods List	71
A4.14	DID – Packaging, Labels and Codes	72
A4.15	DID – Repair and Overhaul Plan.....	74
A4.16	DID – Repair Manual	75
A4.17	DID – Quick Reference Cards.....	77
A4.18	DID – Top Level Assembly Drawing	79
A4.19	DID – Decals and Data Plates	80
A4.20	DID – Application for Spectrum Supportability	82

1.0 SCOPE

1.1 Purpose

- 1.1.1 The purpose of this Statement of Work (SOW) is to define the work requirements for the High Risk Search Remotely Operated Vehicle (HRS-ROV) system, which will be used by the Canadian Armed Forces (CAF) field engineer sections in the roles of intermediate and advanced search teams.

1.2 Background

- 1.2.1 Both intermediate and advanced search teams will be deployed in support of Battle Groups (BG) during overseas and domestic missions. The role of the intermediate search teams will be filled by the field engineer sections that will operate with the maneuver elements of the BG. Advanced teams will be deployed on deliberate search operations or called forward as a result of discoveries made by intermediate search teams involving too high a risk for an intermediate team.

1.3 Intended Use

- 1.3.1 High Risk Search ROVs will need to be man-portable and quickly deployable. They will need to be able to climb stairs, navigate culverts, and operate in a non-line of sight manner and in close spaces.
- 1.3.2 A combination of ROVs, one small and one large, will be the best approach to address the task-specific balance of weight, payload and mobility. These ROVs will need to act as mobile communication relays for each other, in a mesh-type network, to assist with communication connection in subterranean or reinforced concrete buildings, which is generally very disruptive to most communications systems.
- 1.3.3 **Small ROV System** – will be used as a preliminary search tool, primarily for its optics, to identify and mitigate threats, and will be capable of target identification but not necessarily manipulation.
- 1.3.4 **Large ROV System** – will be used primarily for its optics and to manipulate small objects in order to investigate and identify threats. This could apply to opening locked doors, moving obstacles, and being able to interrogate an identified threat by the Explosive Ordnance Disposal (EOD) team should they take over control.

1.4 Acronyms and Abbreviations

ABCA	America, Britain, Canada, Australia
BG	Battle Group
CA	Contracting Authority
CAGE	Commercial and Government Entity
CCS	Control and Communication System
CD	Compact Disk
CDRL	Contract Data Requirements List
CAF	Canadian Armed Forces
CFB	Canadian Forces Base
CFSD	Canadian Forces Supply Depot
CFSS	Canadian Forces Supply System
CFTO	Canadian Forces Technical Order

COTS	Commercial off the Shelf
DCSEM	Director Combat Support Equipment Management
DGLEPM	Director General Land Equipment Program Management
DID	Data Item Description
DMC	Demilitarization Code
DML	Demilitarization List
DND	Department of National Defence
DLP	Director of Land Procurement
DLR	Director of Land Requirements
DPA	Defence Product Act
DSCO	Director Supply Chain Operations
DTMS	Defence Terminology Management System
DWG	Drawing format
ECL	Export Control List
ECCN	Export Control Classification Number
EHS	Environmental Health and Safety
EHSIR	Environmental Health and Safety Impact Report
EME	Electromagnetic Environment
EOD	Explosive Ordnance Disposal
HRSC	High Risk Search Capability
HRS-ROV	High Risk Search Remotely Operated Vehicle
IAW	In Accordance With
ILS	Integrated Logistics Support
ILSM	Integrated Logistics Support Manager
IP	Initial Provisioning
IPC	Initial Provisioning Conference
IPGC	Initial Provisioning Guidance Conference
IPM	Illustrated Parts Manual
ISL	Interim Spares List
ITAR	International Traffic in Arms Regulations
LEMS	Land Equipment Maintenance System
MCN	Material Change Notice
MS	Microsoft
MSDS	Material Safety Data Sheet
NATO	North Atlantic Treaty Organization
NCAGE	NATO Commercial and Government Entity

NDHQ	National Defence Headquarters
NDID	National Defence Index of Documentation
NSCM	NATO Supply Code for Manufacturers
NSN	NATO Stock Number
OEM	Original Equipment Manufacturer
PA	Procurement Authority
PD	Provisioning Documentation
PDF	Portable Document Format
PMP	Project Management Plan
PPB	Provisioning Parts Breakdown
PHST	Packaging, Handling, Storage and Transportation
PSPC	Public Services and Procurement Canada
QRC	Quick Reference Card
R&O	Repair & Overhaul
RFP	Request for Proposal
RM	Risk Management
RSPL	Recommended Spare Parts List
ROV	Remotely Operated Vehicle
SCN	Specification Change Notice
SME	Subject Matter Expert
SOW	Statement of Work
SPTD	Supplementary Provisioning Technical Documentation
STTE	Special Tools and Test Equipment
TA	Technical Authority
TAC	Technical Acceptance Certificate
TMDE	Test, Measurement and Diagnostic Equipment
USML	United States Munitions List
WHMIS	Workplace Hazardous Materials Information System

2.0 APPLICABLE DOCUMENTS

2.1 References

- 2.1.1 Whereas mentioned, the following Standards must be used for the preparation of deliverables to the extent specified in this SOW:

GOVERNMENT FURNISHED INFORMATION

<u>REFERENCE NUMBER</u>	<u>PROMULGATION DATE</u>	<u>REFERENCE TITLE</u>
A-AD-100-100/AG-000	1991-10-15	NATIONAL DEFENCE PUBLISHING POLICY AND ADMINISTRATION PROCEDURES
A-EN-007-000/FP-001		DND ENVIRONMENTAL ASSESSMENT MANUAL
B-GT-D35-001/AG-000	2006-07-10	DNDP 35 MANAGEMENT OF THE RADIO FREQUENCY SPECTRUM
C-01-100-100/AG-005	1996-02-29	SPECIFICATION - ACCEPTANCE OF COMMERCIAL AND FOREIGN GOVERNMENT PUBLICATIONS AS ADOPTED PUBLICATIONS
C-01-100-100/AG-006	1996-03-01	SPECIFICATION – WRITING, FORMAT AND PRODUCTION OF TECHNICAL PUBLICATIONS
C-02-040-009/AG-001	2012-06-01	GENERAL SAFETY STANDARDS
C-55-040-001/TS-001		SAFETY PRECAUTIONS AND INCIDENT PREVENTION INSTRUCTIONS - RADIO FREQUENCY SAFETY PROGRAM
D-01-100-204/SF-000	2000-10-31	SPECIFICATION - PREPARATION OF PREVENTIVE MAINTENANCE INSTRUCTIONS
D-01-100-205/SF-000	2000-10-31	SPECIFICATION - PREPARATION OF CORRECTIVE MAINTENANCE INSTRUCTION
D-01-100-207/SF-002	1996-07-12	SPECIFICATION - PREPARATION OF INTERIM ILLUSTRATED PARTS MANUALS FOR LAND EQUIPMENTS
D-01-100-211/SF-000	1991-06-01	SPECIFICATION – PRESERVATION, STORAGE AND HANDLING INSTRUCTION
D-01-100-214/SF-000	2002-05-01	SPECIFICATION FOR PREPARATION OF PROVISIONING DOCUMENTATION FOR CANADIAN FORCES EQUIPMENT
D-01-400-001/SG-000		STANDARD - ENGINEERING DRAWING PRACTICES FOR CLASS 1 DRAWINGS AND TECHNICAL DATA LIST
D-01-400-002/SF-000	1983-11-30	SPECIFICATION FOR LEVELS OF ENGINEERING DRAWINGS AND ASSOCIATED LISTS
D-02-002-001/SG-001	2003-04-01	STANDARD – IDENTIFICATION MARKING OF CANADIAN MILITARY PROPERTY
D-LM-008-001/SF-001	1983-02-03	METHODS OF PACKAGING
D-LM-008-002/SF-001	1991-08-01	SPECIFICATION FOR MARKING FOR STORAGE AND SHIPMENT

D-LM-008-011/SF-001	1988-11-10	PREPARATION AND USE OF PACKAGING REQUIREMENTS CODES
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COMMERCIALLY AVAILABLE

<u>REFERENCE NUMBER</u>	<u>PROMULGATION DATE</u>	<u>REFERENCE TITLE</u>
ANSI/EIA-649	2004	NATIONAL CONSENSUS STANDARD FOR CONFIGURATION MANAGEMENT, 2004
DAOD 3026-0	2012-05-04	RADIO FREQUENCY SAFETY
DAOD 3026-1	2012-05-04	RADIO FREQUENCY SAFETY PROGRAM
FED-STD-595C	2008	COLORS USED IN GOVERNMENT PROCUREMENT
SAFETY CODE 6	(HEALTH CANADA)	LIMITS OF HUMAN EXPOSURE TO RADIOFREQUENCY FIELDS IN THE FREQUENCY RANGE FROM 3 KHZ TO 300 GHZ
MIL-STD-461F	2007	REQUIREMENTS FOR THE CONTROL OF ELECTROMAGNETIC INTERFERENCE CHARACTERISTICS OF SUBSYSTEMS AND EQUIPMENT
MIL-STD-464C	2010	ELECTROMAGNETIC ENVIRONMENTAL EFFECTS REQUIREMENTS FOR SYSTEMS
NEMA IEC 60529		DEGREES OF PROTECTION PROVIDED BY ENCLOSURES - IP CODE
R.S., 1985, C. H-3	1985	HAZARDOUS PRODUCTS ACT
SOR/86-304	N/A	CANADA OCCUPATIONAL HEALTH AND SAFETY REGULATIONS
SOR/99-7	1998	OZONE-DEPLETING SUBSTANCES REGULATIONS, 1998
STANAG 4694	2011	NATO ACCESSORY RAIL

2.2 Order of Precedence

- 2.2.1 The Contractor must bring to the attention of the TA all perceived inconsistencies between the SOW and the documents attached in the Appendixes and referenced in this SOW.
- 2.2.2 In the event of conflict between the content in this SOW and the referenced documents, the content of this SOW will take precedence.

3.0 PROJECT MANAGEMENT

3.1 Project Management Program

- 3.1.1 The Contractor must designate a Project Manager with the responsibilities to coordinate, execute, and manage the Contractor's project management activities for the Contract. The Contractor's Project Manager must have the total responsibility for all works required under the Contract.
- 3.1.2 The Contractor's Project Manager must be the primary point of contact between the Contractor and the DND Technical Authority and the PSPC Contracting Authority for all issues related to the Contract.

3.2 Project Management Plan (PMP)

- 3.2.1 The Contractor must prepare, deliver, maintain and update a **Project Management Plan (PMP)** IAW CDRL HRS-ROV-PM-001 at Appendix A3.3 (page 36) to ANNEX A and its associated DID HRS-ROV-PM-001 at Appendix A4.3 (page 56) to ANNEX A.

3.3 Project Meetings

- 3.3.1 Meeting Organization and Coordination
 - 3.3.1.1 The Contractor must ensure that data, personnel and facilities are available for each meeting.
 - 3.3.1.2 The Contractor must attend meetings held at the Contractor and DND facilities.
 - 3.3.1.3 The Contractor's Project Manager must be present at all meetings. If the Project Manager does not have final approval authority for decision making and changes, then the person that has that final approval authority must also be present at all meetings.
- 3.3.2 Kick-off Meeting
 - 3.3.2.1 The Contractor must hold and chair a Kick-off Meeting (at the Contractor's facility) no later than twenty-one (21) calendar days after contract award to review and secure a common understanding of the requirements expressed in the following:
 - 3.3.2.1.1 The Contract;
 - 3.3.2.1.2 The SOW;
 - 3.3.2.1.3 General overview of the project, risks, schedule and communication channels to follow, and
 - 3.3.2.1.4 All other contractual and programmatic issues associated with the project as agreed between the TA, CA and the Contractor.
 - 3.3.2.2 During the Kick-off Meeting, the Contractor must provide the following:
 - 3.3.2.2.1 Top Level Assembly Drawings
 - 3.3.2.2.1.1 The Contractor must deliver the Top Level Assembly Drawing (TLAD) for the Large ROV IAW CDRL HRS-ROV-ILS-216 at Appendix A3.18 (page 51) and its associated DID HRS-ROV-ILS-216 at Appendix A4.18 (page 79) to this ANNEX A.
 - 3.3.2.2.3 Refer to Meeting Documentation requirements found at ANNEX A para. 3.3.5 (page 11).
- 3.3.3 Integrated Logistics Support (ILS) Meeting

3.3.3.1 The Contractor must hold and chair an ILS Meeting immediately following the closure of the Kick-Off Meeting (see 3.3.2) to review and secure a common understanding of the requirements expressed in the ILS CDRLs and DIDs, DND CFTOs and specifications (see 2.1).

3.3.4 Other meetings

3.3.4.1 The Contractor and the TA may schedule informal reviews, such as teleconferences, video conferences, briefings and technical interchange meetings, as required to help achieve the requirements of the Contract.

3.3.5 Meeting Documentation

3.3.5.1 The Contractor must prepare and deliver a meeting agenda for all formal meetings and conferences, and prepare and deliver the meeting minutes afterwards.

3.3.5.1.1 The Contractor must prepare **Meeting Agenda(s)** IAW CDRL HRS-ROV-PM-002 at Appendix A3.4 (page 37) to ANNEX A and its associated DID HRS-ROV-PM-002 at Appendix A4.4 (page 57) to ANNEX A.

3.3.5.1.2 The Contractor must record, prepare, and deliver the **Meeting Minutes** of each meeting IAW CDRL HRS-ROV-PM-003 at Appendix A3.5 (page 38) to ANNEX A and its associated DID HRS-ROV-PM-003 at Appendix A4.5 (page 58) to ANNEX A.

3.3.5.2 No change in the interpretation of the SOW, Technical Specification, cost, and schedule, as defined in the Contract, may be authorized by the minutes of a meeting. Such action will require formal Contract amendment by the CA.

4.0 INTEGRATED LOGISTICS SUPPORT (ILS)

4.1 Maintenance Concept

- 4.1.1 The HRS-ROV will be maintainable by CAF operators and technicians in a field environment as prescribed for each item of equipment:
- 4.1.1.1 **Operator Maintenance** – consisting of basic servicing, operator troubleshooting, general maintenance and preventive maintenance that does not require other tools than the tools stored within the Hard Transport Container.
 - 4.1.1.2 **Technician Maintenance** – consisting of corrective and preventive maintenance tasks done by repair and replacement of parts or assemblies, and equipment calibration, and may require STTE to complete. These tasks should not exceed four (4) hours.
- 4.1.2 It is anticipated that the Contractor will perform the more in-depth maintenance tasks consisting of corrective maintenance tasks, reconditioning of assemblies and component rebuilds on an *ad hoc* basis.

4.2 Technical Publication Package

- 4.2.1 The Contractor must prepare and deliver a Technical Publication package for the HRS-ROV comprising of:
- 4.2.1.1 Operator Manuals
 - 4.2.1.1.1 The Contractor must provide an **Operator Manual** with each HRS-ROV Large ROV System IAW CDRL HRS-ROV-ILS-201 at Appendix A3.6 (page 39) and its associated DID HRS-ROV-ILS-201 at Appendix A4.6 (page 59) to this ANNEX A.
 - 4.2.1.1.2 The Contractor must provide an **Operator Manual** with each HRS-ROV Small ROV System IAW CDRL HRS-ROV-ILS-201 at Appendix A3.6 (page 39) and its associated DID HRS-ROV-ILS-201 at Appendix A4.6 (page 59) to this ANNEX A.
 - 4.2.1.2 Initial Training Package
 - 4.2.1.2.1 The Contractor must provide an **Initial Training Package** for the HRS-ROV Large ROV System IAW CDRL HRS-ROV-ILS-202 at Appendix A3.7 (page 40) and its associated DID HRS-ROV-ILS-202 at Appendix A4.7 (page 61) to ANNEX A.
 - 4.2.1.2.2 The Contractor must provide an **Initial Training Package** for the HRS-ROV Small ROV System IAW CDRL HRS-ROV-ILS-202 at Appendix A3.7 (page 40) and its associated DID HRS-ROV-ILS-202 at Appendix A4.7 (page 61) to ANNEX A.
 - 4.2.1.3 Repair Manual
 - 4.2.1.3.1 The Contractor must provide a **Repair Manual** for the HRS-ROV Large ROV System IAW CDRL HRS-ROV-ILS-211 at Appendix A3.16 (page 49) and its associated DID HRS-ROV-ILS-211 at Appendix A4.16 (page 75) to ANNEX A.
 - 4.2.1.3.2 The Contractor must provide a **Repair Manual** for the HRS-ROV Small ROV System IAW CDRL HRS-ROV-ILS-211 at Appendix A3.16 (page 49) and its associated DID HRS-ROV-ILS-211 at Appendix A4.16 (page 75) to ANNEX A.

- 4.2.1.4 Quick Reference Cards
 - 4.2.1.4.1 The Contractor must provide a **Quick Reference Card** with each HRS-ROV Large ROV System IAW IAW CDRL HRS-ROV-ILS-212 at Appendix A3.17 (page 50) and its associated DID HRS-ROV-ILS-212 at Appendix A4.17 (page 77) to ANNEX A.
 - 4.2.1.4.2 The Contractor must provide a **Quick Reference Card** with each HRS-ROV Small ROV System IAW IAW CDRL HRS-ROV-ILS-212 at Appendix A3.17 (page 50) and its associated DID HRS-ROV-ILS-212 at Appendix A4.17 (page 77) to ANNEX A.
- 4.2.2 The Contractor must deliver all Technical Publications in English and Canadian French.
- 4.2.3 The Contractor must have all Technical Publications translated by certified translators, such as members of an authorized provincial association of translators, to ensure the quality of translated text.
 - 4.2.3.1 Upon request from Canada, the Contractor must provide a copy of those certificates and proof of translator accreditation to the DND ILSM.
- 4.2.4 The Contractor must ensure all translations are consistent with approved DND terminology. Approved terminology sources, in order of priority, are as follows:
 - 4.2.4.1 Concise Oxford Dictionary (for English);
 - 4.2.4.2 Petit Robert (for French); and
 - 4.2.4.3 Termium, PSPC Translation Bureau Linguistic Data Bank (<http://www.termiumplus.gc.ca/>);
- 4.2.5 The Contractor must review and accept responsibility for the validity of all (both their own and all sub-Contractors) information found in the publications produced under ANNEX A para. 4.2.1.

4.3 Provisioning Documentation

- 4.3.1 The Contractor must prepare and provide Provisioning Documentation for the HRS-ROV comprising of:
 - 4.3.1.1 Illustrated Parts Manual
 - 4.3.1.1.1 The Contractor must provide an **Illustrated Parts Manual** for the HRS-ROV Large ROV System IAW CDRL HRS-ROV-ILS-203 at Appendix A3.8 (page 41) and its associated DID HRS-ROV-ILS-203 at Appendix A4.8 (page 63) to this ANNEX A.
 - 4.3.1.1.2 The Contractor must provide an **Illustrated Parts Manual** for the HRS-ROV Small ROV System IAW CDRL HRS-ROV-ILS-203 at Appendix A3.8 (page 41) and its associated DID HRS-ROV-ILS-203 at Appendix A4.8 (page 63) to this ANNEX A.
 - 4.3.1.2 Provisioning Parts Breakdown
 - 4.3.1.2.1 The Contractor must provide a **Provisioning Parts Breakdown** for the HRS-ROV Large ROV System IAW CDRL HRS-ROV-ILS-204 at Appendix A3.9 (page 42) and its associated DID HRS-ROV-ILS-204 at Appendix A4.9 (page 65) to this ANNEX A.
 - 4.3.1.2.2 The Contractor must provide a **Provisioning Parts Breakdown** for the HRS-ROV Small ROV System IAW CDRL HRS-ROV-ILS-204 at Appendix A3.9 (page 42) and its associated DID HRS-ROV-ILS-204 at Appendix A4.9 (page 65) to this ANNEX A.

- 4.3.1.3 Supplementary Provisioning Technical Documentation
 - 4.3.1.3.1 The Contractor must provide **Supplementary Provisioning Technical Documentation** for the HRS-ROV Large ROV System IAW CDRL HRS-ROV-ILS-205 at Appendix A3.10 (page 43) and its associated DID HRS-ROV-ILS-205 at Appendix A4.10 (page 66) to this ANNEX A.
 - 4.3.1.3.2 The Contractor must provide **Supplementary Provisioning Technical Documentation** for the HRS-ROV Small ROV System IAW CDRL HRS-ROV-ILS-205 at Appendix A3.10 (page 43) and its associated DID HRS-ROV-ILS-205 at Appendix A4.10 (page 66) to this ANNEX A.
- 4.3.1.4 Special Tools and Test Equipment List
 - 4.3.1.4.1 The Contractor must provide a **Special Tools and Test Equipment List** for the HRS-ROV Large ROV System IAW CDRL HRS-ROV-ILS-206 at Appendix A3.11 (page 44) and its associated DID HRS-ROV-ILS-206 at Appendix A4.11 (page 67) to this ANNEX A.
 - 4.3.1.4.2 The Contractor must provide a **Special Tools and Test Equipment List** for the HRS-ROV Small ROV System IAW CDRL HRS-ROV-ILS-206 at Appendix A3.11 (page 44) and its associated DID HRS-ROV-ILS-206 at Appendix A4.11 (page 67) to this ANNEX A.

4.4 Initial Provisioning Guidance Conference

- 4.4.1 The Contractor must hold and chair an Initial Provisioning Guidance Conference (IPGC).
 - 4.4.1.1 The purpose of the IPGC is to clarify and explain the requirements of the Provisioning Documentation referred to in the contract in preparation for the Initial Provisioning Conference.
 - 4.4.1.2 The IPGC team will normally consist of no more than two DND representatives and should last no longer than one day.
- 4.4.2 Refer to Meeting Documentation requirements found at ANNEX A para. 3.3.5 (page 11).

4.5 Initial Provisioning Conference

- 4.5.1 The Contractor must hold and chair an Initial Provisioning Conference (IPC). The IPC will occur after the Contractor has delivered Provisioning Documentation (PD) suitable to a successful IPC as determined by the DND ILS Manager.
- 4.5.2 The purpose of an IPC is to allow DND to verify that the Provisioning Documentation (PD) reflects the current and complete configuration of the equipment being procured by comparing it against the Illustrated Parts Manual and SPTD, and to select the range of spares required to support the system during an initial period of service of two years. For this purpose, the Contractor must provide:
 - 4.5.2.1 A suitable conference facility;
 - 4.5.2.2 Engineering and product support assistance;
 - 4.5.2.3 The equipment for physical examination, if feasible;
 - 4.5.2.4 Engineering, reliability and maintainability data; and
 - 4.5.2.5 Modification data, if applicable.
- 4.5.3 Refer to Meeting Documentation requirements found at ANNEX A para. 3.3.5 (page 11).

4.6 Initial Training Sessions

- 4.6.1 The Contractor must provide the Initial Training Sessions not later than six (6) weeks after delivery of the HRS-ROVs.
- 4.6.2 The Contractor must provide Initial Training Sessions consisting of:
 - 4.6.2.1 Five (5) training sessions for **Operators** (train-the-trainer type) given to from one (1) to ten (10) students per course, course length of 2 days, at:
 - 4.6.2.1.1 CFB Edmonton;
 - 4.6.2.1.2 CFB Petawawa;
 - 4.6.2.1.3 CFB Valcartier, and
 - 4.6.2.1.4 CFB Gagetown (two courses).
 - 4.6.2.2 Five (5) training sessions for **Technicians** (train-the-trainer type) given to from one (1) to five (5) students per course, course length of 2 days, at:
 - 4.6.2.2.1 CFB Edmonton;
 - 4.6.2.2.2 CFB Petawawa;
 - 4.6.2.2.3 CFB Valcartier, and
 - 4.6.2.2.4 CFB Gagetown (two courses).
- 4.6.3 The Contractor must provide the Initial Training Sessions in English, taught by a bilingual instructor(s), in order to be able to understand and answer questions from the class in both official languages: English and Canadian French.
- 4.6.4 The Contractor must provide an Initial Training Session that includes:
 - 4.6.4.1 **Operators** - All training relating to setup, operation, safety precautions, and Operators Maintenance (see ANNEX A 4.1 Maintenance Concept).
 - 4.6.4.2 **Technicians** – All training relating to Technician Maintenance (see ANNEX A 4.1 Maintenance Concept).
- 4.6.5 The Contractor must provide all the materials required for training, and all course material and handouts, in English and Canadian French.
- 4.6.6 The Contractor must use the approved Initial Training Package for the Initial Training Session.
- 4.6.7 The Contractor must provide trainer(s) that are considered Subject Matter Expert(s) (SME) on the HRS-ROV equipment being provided, and have no less than two (2) years of experience operating and maintaining the HRS-ROVs.

4.7 Identification Plates

- 4.7.1 The Contractor must provide all required **Identification Plates** and their designs? IAW CDRL HRS-ROV-ILS-207 at Appendix A3.12 (page 45) and its associated DID HRS-ROV-ILS-207 at Appendix A4.12 (page 69) to this ANNEX A.
- 4.7.2 The Contractor must attach Identification Plates to the following components for ease of tracking within the Canadian Forces Supply System:
 - 4.7.2.1 Prime Equipment;
 - 4.7.2.2 Spares;
 - 4.7.2.3 STTE, and
 - 4.7.2.4 Training Equipment.

4.8 **Controlled Goods List**

- 4.8.1 Contractor must provide a **Controlled Goods List** and the Demilitarization Code (DMC) for the HRS-ROV Large ROV System IAW CDRL HRS-ROV-ILS-208 at Appendix A3.13 (page 46) and its associated DID HRS-ROV-ILS-208 at Appendix A4.13 (page 71) to this ANNEX A.
- 4.8.2 Contractor must provide a **Controlled Goods List** and the Demilitarization Code (DMC) for the HRS-ROV Small ROV System IAW CDRL HRS-ROV-ILS-208 at Appendix A3.13 (page 46) and its associated DID HRS-ROV-ILS-208 at Appendix A4.13 (page 71) to this ANNEX A.

4.9 **Decals and Data Plates**

- 4.9.1 The Contractor must deliver all decals and data plates marked in metric units.
- 4.9.2 Where international symbols are not possible, the Contractor must provide bilingual markings in English and Canadian French.
- 4.9.3 The Contractor must provide warning and caution data plates in both official languages of Canada (English and Canadian French) where necessary to protect personnel and equipment.
- 4.9.4 The Contractor must provide **Decals and Data Plates** and their designs for HRS-ROV Large ROV System IAW CDRL HRS-ROV-ILS-214 at Appendix A3.19 (page 52) and its associated DID HRS-ROV-ILS-214 at Appendix A4.19 (page 80) to this ANNEX A.
- 4.9.5 The Contractor must provide **Decals and Data Plates** and their designs for HRS-ROV Small ROV System IAW CDRL HRS-ROV-ILS-214 at Appendix A3.19 (page 52) and its associated DID HRS-ROV-ILS-214 at Appendix A4.19 (page 80) to this ANNEX A.

4.10 **Packaging, Labels and Codes**

- 4.10.1 The Contractor must supply all parts and equipment, packaged as per D-LM-008-001/SF-001 following:
 - 4.10.1.1 Level B Limited Military Package;
 - 4.10.1.2 Level B Limited Military Pack;
- 4.10.2 The Contractor must label all packaging, produced under 4.10.1 above, as per D-LM-008-002/SF-001, using D-LM-008-011/SF-001 to prepare the required packaging and preservation codes.
- 4.10.3 The Contractor must provide **Packaging, Labels and Codes** IAW CDRL HRS-ROV-ILS-209 at Appendix A3.14 (page 47) to Annex A, and its associated DID HRS-ROV-ILS-209 at Appendix A4.14 (page 72) to this ANNEX A.

4.11 **Repair and Overhaul Plan**

- 4.11.1 The Contractor must provide a **Repair and Overhaul Plan** IAW CDRL HRS-ROV-ILS-210 at Appendix A3.15 (page 48) to ANNEX A, and its associated DID HRS-ROV-ILS-210 at Appendix A4.15 (page 74) to this ANNEX A.

4.12 **Application for Spectrum Supportability**

- 4.12.1 For HRS-ROV Large ROV System and Small ROV System RF component (Transmitting and Receiving), the Contractor must prepare and provide all required information for the **Application for Spectrum Supportability** IAW CDRL HRS-ROV-ILS-215 at Appendix A3.20 (page 53) to ANNEX A, and its associated DID HRS-ROV-ILS-215 at Appendix A4.20 (page 82) to this ANNEX A and ANNEX D – Application for Spectrum Supportability.

4.12.1.1 The HRS-ROV system RF components must be certified by Industry Canada or meet Spectrum Supportability. Spectrum Supportability is granted when RF equipment is found to be in conformity with National Spectrum Policy and Standards to ensure compatibility with existing RF equipment, both military and civilian, currently operating in the same frequency band. DND policy, standards, and organization for spectrum management and instructions for obtaining frequency supportability and licensing can be found in B-GT-D35-001/AG-000 (DNDP 35) Management of the Radio Frequency Spectrum. National Spectrum Policy and Standards can be found on Industry Canada's website (<http://www.ic.gc.ca>) at:

4.12.1.1.1 http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf01841.html.

4.13 Data Deliverable Format

4.13.1 Unless otherwise specified as a specific requirement, the Contractor must deliver all of the soft copies of data deliverables in formats compatible with the office software currently in use by the DND as listed:

- 4.13.1.1 Microsoft (MS) Windows 7 Enterprise Operating System (OS), Service Pack 1;
- 4.13.1.2 MS Internet Explorer (IE) 9.0 with 256 Bit Encryption;
- 4.13.1.3 MS Office Professional Plus 2010 (32-bit) (Word, Excel, Access, PowerPoint and Outlook);
- 4.13.1.4 Adobe Acrobat X; and
- 4.13.1.5 WinZip 8.1 SR-1;

5.0 ENVIRONMENTAL HEALTH AND SAFETY

5.1 General

- 5.1.1 Environmental Health and Safety (EHS) consideration must be incorporated and documented into the decision making process for the Work performed under this Contract. EHS documentation must be maintained within the project file throughout the life of this Contract. The Contractor must provide for and allow DND inspection and monitoring of EHS documentation throughout the life of the contract.
- 5.1.2 Polychlorinated Biphenyls (PCBs), halocarbons (as identified within the Ozone-Depleting Substances Regulations, 1998), and asbestos are not to be incorporated into the design, operation and maintenance of the equipment, and products used in equipment support activities.
- 5.1.3 The Contractor must identify and report all sources of mercury contained and used within the design, operation and maintenance of the equipment, and products used in equipment support activities.
 - 5.1.3.1 The Contractor must include warnings, which reflect the requirements of the Products Containing Mercury Regulations, in the Technical Publications when the equipment contains mercury.
- 5.1.4 The Department is committed to the Federal programs to reduce and eliminate emissions from toxic substances. Contractors must identify and submit justifications for the use of all regulated products and those containing substances identified within the Accelerated Reduction/Elimination of Toxics (ARET, <http://www.ec.gc.ca/nopp/aret/en/list.cfm>), National Pollutant Release Inventory (NPRI, http://www.ec.gc.ca/pdb/npri/npri_home_e.cfm) and List of Challenge Substances (http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/list_e.html), and also for products containing heavy metals (heavy metals are those identified within Schedule 1 of the Canadian Environmental Protection Act (CEPA)) to the technical authority for approval.
- 5.1.5 Canada Labour Code, Part II dictates that the least hazardous materials should be used at the workplace. Therefore, the Contractor is to strive to use the least hazardous product that meets the requisite performance requirements.
- 5.1.6 The Contractor must incorporate EHS warnings and instructions in direct relation of the EHS risks presented in the contents into documentation.
- 5.1.7 It is the Contractor's responsibility to ensure that specifications, standards, support documents and test programs are reviewed for EHS compliance.

5.2 Environmental Management System

- 5.2.1 The Contractor must have a management system in place to control environmental, health and safety impacts resulting from their activities, products and services.
- 5.2.2 The Contractor must have a formalized set of procedures and control measures in place to achieve conformance with the requirements of this Work, while ensuring environmental, health and safety protection and pollution prevention.
- 5.2.3 The Contractor must also make reasonable effort to monitor that all subcontractors are in compliance with applicable environmental laws and regulations.

5.3 EHS Packaging Labels and MSDS

- 5.3.1 The Contractor must label and ship goods falling within the Hazardous Products Act, R.S.C. 1985, c. H-3 and regulation(s) there under, in accordance with the said Act and regulation(s).

- 5.3.1.1 The Contractor must ship goods accompanied by the required Material Safety Data Sheet(s) (MSDS), completed in either English or Canadian French.
- 5.3.1.2 The Contractor must clearly identify the contents of the hazardous material with labels, and the MSDS must explain what those hazards are.

6.0 TECHNICAL REQUIREMENTS

6.1 Overview

- 6.1.1 The Contractor must comply with all specified requirements for each component of the HRS-ROV System, as stated in:
 - 6.1.1.1 A1.0 APPENDIX: HRS-ROV - SMALL ROV SYSTEM - PERFORMANCE SPECIFICATION
 - 6.1.1.2 A2.0 APPENDIX: HRS-ROV - LARGE ROV SYSTEM - PERFORMANCE SPECIFICATION

A1.0 APPENDIX: HRS-ROV - SMALL ROV SYSTEM - PERFORMANCE SPECIFICATION

A1.1 System Requirements

A1.1.1 General

- A1.1.1.1 The Small ROV system must be assembled from production components from a current production line that are not prototypes or pre-production models.
- A1.1.1.2 The Small ROV system must be based on proven, fielded equipment that is in-service with a North Atlantic Treaty Organization (NATO) or American, British, Canadian, Australian (ABCA) military partner or police agency of those countries.
- A1.1.1.3 The Small ROV system must consist of the following components, and is further described in detail under section A1.2:
 - A1.1.1.3.1 One (1) Small Remotely Operated Vehicle;
 - A1.1.1.3.2 One (1) Control and Communication System (CCS) for operating both the Small ROV and Large ROV (same CCS used for both ROVs);
 - A1.1.1.3.3 Battery Set(s) for six (6) hours of operation for both the CCS and Small ROV;
 - A1.1.1.3.4 One (1) Battery Charging System;
 - A1.1.1.3.5 One (1) Drop Charge Release Mechanism, and
 - A1.1.1.3.6 One (1) Hard Transport Container for the above components.
- A1.1.1.4 The Small ROV system must include (stored within the Hard Transport Container) all tools required to setup and maintain the Small ROV system in accordance with the **Operator Maintenance** Concept ANNEX A paragraph 4.1.1.1 (page 12).

A1.1.2 Transportability

- A1.1.2.1 The Small ROV system must be easily transportable by air, land or sea with not more than ten (10) minutes preparation time.
- A1.1.2.2 The Small ROV system must be transportable by fixed and rotary wing aircraft, cargo ships, rail, and commercial and military wheeled vehicles on highways and cross-country.

A1.1.3 Radio Frequency Operation and Safety

- A1.1.3.1 The Small ROV system must operate within either:
 - A1.1.3.1.1 The commercial 2.4GHz bandwidth, or
 - A1.1.3.1.2 The 4400-4900 MHz bandwidth (the 4800-4900MHz bandwidth section is currently the most open, so would be the preference) which is designated for Government of Canada use.
- A1.1.3.2 The Small ROV system must meet requirements of DND/CAF RF Safety Program IAW DAOD 3026-0, DAOD 3026-1 and CFTO C-55-040-001TS-002, and it must be in compliance with the requirements of Health Canada's Safety Code 6: Limits of Human Exposure to Radio frequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz.

A1.1.4 Electromagnetic Interference

- A1.1.4.1 The Small ROV system must comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules.

A1.2 System Component Requirements

A1.2.1 Small Remotely Operated Vehicle

- A1.2.1.1 Mobile Communication Relay
- A1.2.1.1.1 The Small ROV must act as a mobile RF communication relay, in a mesh-type network, to assist with communication connection with other Small ROVs and Large ROVs in a non-line-of-sight, subterranean, or reinforced concrete buildings, or to extend the range in line-of-sight applications.
- A1.2.1.2 Durability, Ingress Protection and Cleaning
- A1.2.1.2.1 The Small ROV must survive multiple drops from a height of no less than four (4) meters onto concrete, and remain fully functional.
- A1.2.1.2.1.1 This will include drops in any body orientation, and will include a small horizontal velocity causing rolling and bouncing upon impact.
- A1.2.1.2.1.2 No payloads or attachments will be attached to the Small ROV during the drops.
- A1.2.1.2.2 The Small ROV, not including the Drop Charge Release Mechanism, must have no less than an IP67 rating, or equivalent, IAW NEMA IEC 60529.
- A1.2.1.2.3 The Small ROV must allow cleaning of the exterior surfaces with hot and cold low pressure water, steam and detergents, without wear, deterioration or damage.
- A1.2.1.3 Velocity
- A1.2.1.3.1 The Small ROV must reach a velocity of no less than five (5) km/h on pavement or concrete.
- A1.2.1.4 Mobility
- A1.2.1.4.1 The Small ROV must climb and descend from obstacles (such as a road curb) of no less than a ten (10) cm rise while carrying the maximum payload weight, see ANNEX A para. A1.2.1.6.2 (page 23).
- A1.2.1.4.2 The Small ROV must traverse a dry grass-covered slope of no less than 15 degrees (26.8% grade) while carrying the maximum payload weight, see ANNEX A para. A1.2.1.6.2 (page 23).
- A1.2.1.4.3 The Small ROV must climb and descend dry grass-covered slopes of no less than 30 degrees (57.7% grade) while carrying the maximum payload weight, see ANNEX A para. A1.2.1.6.2 (page 23).
- A1.2.1.5 Automatic Brake
- A1.2.1.5.1 The Small ROV must hold position when not commanded to move, including when the Small ROV is stopped on uneven ground or slopes and while carrying the maximum payload weight, see ANNEX A para. A1.2.1.6.2 (page 23).
- A1.2.1.6 Payload and Mount
- A1.2.1.6.1 The Small ROV must include a tactical rail meeting STANAG 4694 to provide an anchor point for payloads.

- A1.2.1.6.2 The Small ROV must carry no less than a 2.0kg payload weight.
- A1.2.1.7 Field of View
 - A1.2.1.7.1 The Small ROV must have an **overall** front field of view with:
 - A1.2.1.7.1.1 No less than a 60 degree horizontal field of view.
 - A1.2.1.7.1.2 No less than a 120 degree vertical field of view.
 - 1.2.1.7.1.2.1 If required, the vertical field of view range can be met by either the camera tilting, the Small ROV body tilting, or through a software-based tilt.
 - A1.2.1.7.2 The Small ROV must have an **overall** rear field of view with:
 - A1.2.1.7.2.1 No less than a 60 degree horizontal field of view.
 - A1.2.1.7.2.2 No less than a 60 degree vertical field of view.
 - 1.2.1.7.2.2.1 If required, the vertical field of view range can be met by either the camera tilting, the Small ROV body tilting, or through a software-based tilt.
- A1.2.2 **Control and Communication System**
 - A1.2.2.1 Communication with Small ROV
 - A1.2.2.1.1 Line-of-Sight - The CCS must maintain communication with and control of the Small ROV at a distance of no less than two hundred (200m) meters on open terrain.
 - A1.2.2.2 Control Small and Large ROV
 - A1.2.2.2.1 The CCS must be identical to the CCS used to control the Large ROV, and must switch between and operate either the Small ROV or Large ROV.
 - A1.2.2.3 Additional requirements for the Control and Communication System are found under para. A2.2.2 (page 28) for the Large ROV system.
- A1.2.3 **Battery Set(s)**
 - A1.2.3.1 Each Battery Set of the CCS and Small ROV must provide no less than one (1) hour of operation at an approximate ideal temperature of 20°C (+/- 3 °C). Operation is defined as:
 - A1.2.3.1.1 Power-on and initialization sequence of the Small ROV and CCS.
 - A1.2.3.1.2 Movement of the Small ROV 'down range' for 100m, with periodic movements throughout the majority of the one (1) hour, and then returning back for 100m before the one (1) hour has expired, and
 - A1.2.3.1.3 Continuous video transmission (small fluctuations allowed) between the Small ROV and CCS throughout the one (1) hour.
 - A1.2.3.2 Enough Battery Sets for six (6) hours of operation must be provided for both the CCS and Small ROV.
- A1.2.4 **Battery Charging System**
 - A1.2.4.1 The Battery Charging System must be provided for both the CCS and Small ROV Battery Sets.
 - A1.2.4.2 The Battery Charging System must include a universal power input of 110VAC – 220VAC, 50Hz – 60Hz, with North American plug type.

- A1.2.4.3 The Battery Charging System must provide a visual indication of battery charging in order to indicate when charging is in progress and when it is complete.
- A1.2.4.4 The Battery Charging System full re-charge time for one (1) Battery Set must not exceed eight (8) hours.
- A1.2.4.5 The Battery Charging System must be certified CE, UL or equivalent.
- A1.2.5 **Drop Charge Release Mechanism**
 - A1.2.5.1 Drop Charge Release Mechanism must carry and actuate the physical release of a drop charge (defined as two taped blocks of C4 explosive and RF Initiator), at least 1.60kg (approx. 3.53lbs) in weight and a maximum of 6cm width x 6cm height x 30cm length (approx. 2.36 x 2.36 x 11.80 inches).
 - A1.2.5.2 Drop Charge Release Mechanism must support and hold the drop charge while performing the mobility requirements of ANNEX A para. A1.2.1.4 (page 22).
 - A1.2.5.2.1 It is acceptable to provide a system that attaches the drop charge to a disposable plate which is itself released from the ROV.
 - A1.2.5.3 Drop Charge Release Mechanism must be controllable through the CCS.
 - A1.2.5.4 Drop Charge initiation will be accomplished through in-service RF initiator device (Breach MC RF Initiator).
- A1.2.6 **Hard Transport Container**
 - A1.2.6.1 The Small ROV system must be stored and shipped within a single Hard Transport Container.
 - A1.2.6.2 The Hard Transport Container must have no less than an IP66 rating, or equivalent, IAW NEMA IEC 60529.

A1.3 Physical Requirements

- A1.3.1 **Size**
 - A1.3.1.1 The Small ROV and CCS, with one (1) set of batteries each, must fit within the Soldier's Tactical Field Pack (NSN: 8465-20-000-2774).
 - A1.3.1.1.1 The Soldier's Tactical Field Pack (NSN: 8465-20-000-2774) has an available volume of height – 20 inches, width – 12 inches and depth – 8 inches.
- A1.3.2 **Weight**
 - A1.3.2.1 The Small ROV and CCS, with one (1) set of batteries each, must not exceed 10.00kg in combined weight.
- A1.3.3 **Colour**
 - A1.3.3.1 The Small ROV and CCS must have the predominant exterior colour of flat/matte finish green, flat/matte finish earth tone, flat/matte finish grey or black, so that it contributes to and does not compromise a soldier's camouflage.
 - A1.3.3.1.1 If these items need to be painted in order to meet this requirement, the acceptable paint colours must be 34094 Green, 30051 Brown, 33446 Dessert Tan, 34082 Green, 33105 Brown, or 33303 Sand and Black, IAW FED-STD-595C, and must be flat/matte finish.

A1.4 Environmental/Climatic Requirements

A1.4.1 Climatic Conditions

- A1.4.1.1 The Small ROV and CCS components must operate in temperatures ranging from -19°C to +39°C.
- A1.4.1.2 The Small ROV and CCS components must operate in relative humidity ranging from 5% to 100%.

A1.4.2 Atmospheric Conditions

- A1.4.2.1 The Small ROV must operate in heavy rain up to 20 mm/hr and rain driven by wind gusts up to 40 km/h over a period of no less than one (1) hour operation.
- A1.4.2.2 The Small ROV must operate in blowing sand and dust caused by wind gusts up to 40 km/h over a period of no less than one (1) hour.
- A1.4.2.3 Operation is defined as:
 - A1.4.2.3.1 Power-on and initialization sequence of the Small ROV and CCS.
 - A1.4.2.3.2 Movement of the Small ROV 'down range' for 100m, with periodic movements throughout the majority of the one (1) hour, and then returning back for 100m before the one (1) hour has expired, and
 - A1.4.2.3.3 Continuous video transmission (small fluctuations allowed) between the Small ROV and CCS throughout the one (1) hour.

A2.0 APPENDIX: HRS-ROV - LARGE ROV SYSTEM - PERFORMANCE SPECIFICATION

A2.1 System Requirements

A2.1.1 General

- A2.1.1.1 The Large ROV system must be assembled from production components from a current production line that are not prototypes or pre-production models.
- A2.1.1.2 The Large ROV system must be based on proven, fielded equipment that is in-service with a North Atlantic Treaty Organization (NATO) or American, British, Canadian, Australian (ABCA) military partner or police agency of those countries.
- A2.1.1.3 The Large ROV system must consist of the following components, and is further described in detail under section A2.2:
 - A2.1.1.3.1 One (1) Large Remotely Operated Vehicle;
 - A2.1.1.3.2 One (1) Control and Communication System (CCS) for operating both the Large ROV and Small ROV (same CCS used for both ROVs);
 - A2.1.1.3.3 Battery Set(s) for eight (8) hours of operation for both the CCS and Large ROV;
 - A2.1.1.3.4 One (1) Battery Charging System;
 - A2.1.1.3.5 One (1) Manipulator Arm and Gripper, including disrupter mounts, and
 - A2.1.1.3.6 One (1) Hard Transport Container for the above components.
- A2.1.1.4 The Large ROV system must include (stored within the Hard Transport Container) all tools required to setup and maintain the Large ROV system in accordance with the **Operator Maintenance** Concept ANNEX A paragraph 4.1.1.1 (page 12).

A2.1.2 Transportability

- A2.1.2.1 The Large ROV system must be easily transportable by air, land or sea with not more than ten (10) minutes preparation time.
- A2.1.2.2 The Large ROV system must be transportable by fixed and rotary wing aircraft, cargo ships, rail, and commercial and military wheeled vehicles on highways and cross-country.

A2.1.3 Radio Frequency Operation and Safety

- A2.1.3.1 The Large ROV system must operate within either:
 - A2.1.3.1.1 The commercial 2.4GHz bandwidth, or
 - A2.1.3.1.2 The 4400-4900 MHz bandwidth (the 4800-4900MHz bandwidth section is currently the most open, so would be the preference) which is designated for Government of Canada use.
- A2.1.3.2 The Large ROV system must meet requirements of DND/CAF RF Safety Program IAW DAOD 3026-0, DAOD 3026-1 and CFTO C-55-040-001TS-002, and it must be in compliance with the requirements of Health Canada's Safety Code 6: Limits of Human Exposure to Radio frequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz.

A2.1.4 Electromagnetic Interference and Environment

- A2.1.4.1 The Large ROV system must comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules.

A2.2 System Component Requirements

A2.2.1 Remotely Operated Vehicle

A2.2.1.1 Mobile Communication Relay

- A2.2.1.1.1 The Large ROV must act as a mobile RF communication relay, in a mesh-type network, to assist with communication connection with other Large ROVs and Small ROVs in a non-line-of-sight, subterranean, or reinforced concrete buildings, or to extend the range in line-of-sight applications.

A2.2.1.2 Fibre Optic Cable and Mount

- A2.2.1.2.1 The Large ROV must carry and feed-out fibre optic cable of no less than two hundred (200m) meters +/- 2m.

A2.2.1.3 Ingress Protection and Cleaning

- A2.2.1.3.1 The Large ROV must have no less than an IP65 rating, or equivalent, IAW NEMA IEC 60529.

- A2.2.1.3.2 The Large ROV must allow cleaning of the exterior surfaces with hot and cold low pressure water, steam and detergents, without wear, deterioration or damage.

A2.2.1.4 Velocity

- A2.2.1.4.1 The Large ROV must reach a velocity of no less than five (5) km/h on pavement or concrete.

A2.2.1.5 Mobility

- A2.2.1.5.1 The Large ROV must climb and descend stairs with no less than a twenty (20) cm rise while carrying the maximum payload weight, see ANNEX A para. A2.2.1.7.2 (page 27).

- A2.2.1.5.2 The Large ROV must traverse a dry grass-covered slope of no less than 15 degrees (26.8% grade) while carrying the maximum payload weight, see ANNEX A para. A2.2.1.7.2 (page 27).

- A2.2.1.5.3 The Large ROV must climb and descend dry grass-covered slopes of no less than 30 degrees (57.7% grade) while carrying the maximum payload weight, see ANNEX A para. A2.2.1.7.2 (page 27).

- A2.2.1.5.4 The Large ROV must traverse smooth polished surfaces, hard road surfaces, gravel, mud, fine sand, snow and ice.

A2.2.1.6 Automatic Brake

- A2.2.1.6.1 The Large ROV must hold position when not commanded to move, including when the Large ROV is stopped on uneven ground or slopes and while carrying the maximum payload weight, see ANNEX A para. A2.2.1.7.2 (page 27).

A2.2.1.7 Payload and Mount

- A2.2.1.7.1 The Large ROV must include a tactical rail meeting STANAG 4694 to provide an anchor point for payloads.

- A2.2.1.7.2 The Large ROV must carry no less than a 5kg payload weight.

- A2.2.1.8 Field of View
 - A2.2.1.8.1 The Large ROV must have an **overall** field of view, both front and rear, with:
 - A2.2.1.8.1.1 Low-light and near-infrared illuminators
 - A2.2.1.8.1.2 No less than a 90 degree horizontal field of view, and
 - A2.2.1.8.1.3 No less than a 90 degree vertical field of view.
 - 2.2.1.8.1.3.1 If required, the vertical field of view range can be met by either the camera tilting, the Large ROV body tilting, or through a software-based tilt.
 - A2.2.1.8.2 Additional field of view requirements listed under Manipulator Arm and Gripper para. A2.2.5.
- A2.2.1.9 Microphone for External Sounds
 - A2.2.1.9.1 The Large ROV must have a microphone allowing for the operator holding the CCS to hear external sounds in the environment around the Large ROV.
- A2.2.2 **Control and Communication System**
 - A2.2.2.1 RF Communication
 - A2.2.2.1.1 Line-of-Sight - The CCS must maintain communication with and control of the Large ROV at a distance of no less than four hundred (400m) meters on open terrain.
 - A2.2.2.2 Fibre Optic Communication
 - A2.2.2.2.1 The CCS must have a Fibre Optic Cable connector and link to allow communication with and control of the Large ROV.
 - A2.2.2.3 Ingress Protection
 - A2.2.2.3.1 The CCS must have no less than an IP64 rating, or equivalent, IAW NEMA IEC 60529.
 - A2.2.2.4 Power Level Display
 - A2.2.2.4.1 The CCS must display its own power level and the power level of the Large ROV, and must provide a low power warning indication when CCS or the Large ROV battery are nearing depletion and require replacement.
 - A2.2.2.5 Image Display
 - A2.2.2.5.1 The CCS must have an Image Display with a minimum resolution of 640x480.
 - A2.2.2.5.2 The CCS must have an Image Display whose brightness is user adjustable for daylight and low light viewing.
 - A2.2.2.6 Image Recoding
 - A2.2.2.6.1 The CCS must record and store no less than 20 hours of images and videos from the Small and Large ROV cameras (regardless of when the Small and Large ROV are moving or stopped).
 - A2.2.2.7 Control Small and Large ROV

- A2.2.2.7.1 The CCS must be identical to the CCS used to control the Small ROV, and must switch between and operate either the Small ROV or Large ROV.
- A2.2.2.7.2 The CCS, when not controlling a ROV, must display camera images from any other selected ROV within the mesh-type network.
- A2.2.2.8 **Speaker/Headset for External Sounds**
 - A2.2.2.8.1 The CCS must have a speaker or headset allowing for the operator to hear external sounds in the environment around the Large ROV.
- A2.2.3 **Battery Set(s)**
 - A2.2.3.1 Each Battery Set of the CCS and Large ROV must provide no less than two (2) hours of operation at an approximate ideal temperature of 20°C (+/- 3 °C).
 - A2.2.3.2 Operation is defined as:
 - A2.2.3.2.1 Power-on and initialization sequence of the Large ROV and CCS.
 - A2.2.3.2.2 Movement of the Large ROV 'down range' for 200m, with periodic movements throughout the majority of the two (2) hours, and then returning back for 200m before the two (2) hours has expired, and
 - A2.2.3.2.3 Continuous video transmission (small fluctuations allowed) between the Large ROV and CCS throughout the two (2) hours.
 - A2.2.3.3 Enough Battery Sets for eight (8) hours of operation must be provided for both the CCS and Large ROV.
 - A2.2.3.4 The Battery Set must be replaced in no more than one (1) minute.
- A2.2.4 **Battery Charging System**
 - A2.2.4.1 The Battery Charging System must be provided for both the CCS and Large ROV Battery Sets.
 - A2.2.4.2 The Battery Charging System must include a universal power input of 110VAC – 220VAC, 50Hz – 60Hz, with North American plug type.
 - A2.2.4.3 The Battery Charging System must provide a visual indication of the battery charging in order to indicate when charging is in progress or complete.
 - A2.2.4.4 The Battery Charging System full re-charge time for one (1) Battery Set must not exceed eight (8) hours.
 - A2.2.4.5 The Battery Charging System must be certified CE, UL or equivalent.
- A2.2.5 **Manipulator Arm and Gripper**
 - A2.2.5.1 The Manipulator Arm must have no less than four (4) degrees of freedom for precise maneuvering of the arm and gripper.
 - A2.2.5.1.1 The gripper opening and closing must not count as one of the degrees of freedom required.
 - A2.2.5.2 The Manipulator Arm and Gripper must have factory pre-set poses allowing for rapid deployment or pack-up.
 - A2.2.5.3 The Manipulator Arm and Gripper must lift from the ground and carry objects of no less than 4.50kg in weight.
 - A2.2.5.4 The Manipulator Arm and Gripper, when fully extended, must lift objects of no less than 3.00kg in weight.

- A2.2.5.5 The Gripper must have no less than 13.61 kg (approx. 30lbs) of grip force.
- A2.2.5.6 The Gripper must have no less than a ten (10) cm gripper opening to grasp objects.
- A2.2.5.7 The Manipulator Arm must have a field of view with:
 - A2.2.5.7.1 No less than a 60 degree horizontal field of view.
 - A2.2.5.7.2 No less than a 60 degree vertical field of view.
 - A2.2.5.7.3 Pan no less than +/- 180 degrees (left and right).
 - A2.2.5.7.3.1 Panning can be met either through the camera itself panning or Manipulator Arm panning.
 - A2.2.5.7.4 Tilt no less than +/- 180 degrees (up and down), and
 - A2.2.5.7.4.1 Tilting can be met either through the camera itself tilting or Manipulator Arm tilting.
 - A2.2.5.7.5 Low-light and near-infrared illuminators.
- A2.2.5.8 The Manipulator Arm must carry and have disrupter mount(s), and sleeve(s) if needed, for the following in-service barrel disrupters:
 - A2.2.5.8.1 AB Precision Ltd. Needle Plus (Recoil) (NSN: 1385-99-485-3385)
 - A2.2.5.8.2 AB Precision Ltd. ABL-2000L (Recoilless) (NSN: 1385-99-151-5469)
 - A2.2.5.8.3 AB Precision Ltd. ABL-3000L (Recoilless) (NSN: 1385-99-447-0479)
- A2.2.6 **Hard Transport Container**
 - A2.2.6.1 The Large ROV system must be stored and shipped within a single Hard Transport Container.
 - A2.2.6.2 The Hard Transport Container must have no less than an IP66 rating, or equivalent, IAW NEMA IEC 60529.

A2.3 Physical Requirements

A2.3.1 Size

- A2.3.1.1 The Large ROV, with attachments removed in preparation for transport, must fit within the Expedition Overload BVS (NSN: 8105-01-649-0611) outer compartment.
 - A2.3.1.1.1 The Expedition Overload BVS (NSN: 8105-01-649-0611) outer compartment has an available volume of height – 28 inches, width – 14 inches and depth – 12 inches.
 - A2.3.1.1.2 Removing attachments in preparation for transport must take no longer than 5 minutes to remove or re-attach, and must only require the tools provided with the Large ROV system as per para. A2.1.1.4

A2.3.2 Weight

- A2.3.2.1 The Large ROV, Manipulator Arm and Gripper, (but not including the Fibre Optic Cable and Mount) and CCS, with one (1) set of batteries each, must not exceed 20.00kg in combined weight.

A2.3.3 Colour

- A2.3.3.1 The Large ROV and CCS must have the predominant exterior colour of flat/matte finish green, flat/matte finish earth tone, flat/matte finish grey or

black, so that it contributes to and does not compromise a soldier's camouflage.

- A2.3.3.1.1 If these items will need to be painted, in order to meet this requirement, the acceptable paint colours must be 34094 Green, 30051 Brown, 33446 Desert Tan, 34082 Green, 33105 Brown, or 33303 Sand and Black, IAW FED-STD-595C, and must be flat/matte finish.

A2.4 Environmental/Climatic Requirements

A2.4.1 Climatic Conditions

- A2.4.1.1 The Large ROV and CCS components must operate in temperatures ranging from -19°C to +39°C.
- A2.4.1.2 The Large ROV and CCS components must operate in relative humidity ranging from 5% to 100%.

A2.4.2 Atmospheric Conditions

- A2.4.2.1 The Large ROV must operate in heavy rain up to 20 mm/hr and rain driven by wind gusts up to 40 km/h over a period of no less than one (1) hour operation.
- A2.4.2.2 The Large ROV must operate in blowing sand and dust caused by wind gusts up to 40 km/h over a period of no less than one (1) hour.
- A2.4.2.3 Operation is defined as:
 - A2.4.2.3.1 Power-on and initialization sequence of the Large ROV and CCS.
 - A2.4.2.3.2 Movement of the Large ROV 'down range' for 200m, with periodic movements throughout the majority of the one (1) hour, and then returning back for 200m before the one (1) hour has expired, and
 - A2.4.2.3.3 Continuous video transmission (small fluctuations allowed) between the Large ROV and CCS throughout the one (1) hour.

A3.0 APPENDIX: CONTRACT DATA REQUIREMENTS LIST

A3.1 CDRL Item List

CDRL #	Title	DID #
HRS-ROV-PM-001	Project Management Plan	HRS-ROV-PM-001
HRS-ROV-PM-002	Meeting Agenda	HRS-ROV-PM-002
HRS-ROV-PM-003	Meeting Minutes	HRS-ROV-PM-003
HRS-ROV-ILS-201	Operator Manuals	HRS-ROV-ILS-201
HRS-ROV-ILS-202	Initial Training Package	HRS-ROV-ILS-202
HRS-ROV-ILS-203	Illustrated Parts Manual	HRS-ROV-ILS-203
HRS-ROV-ILS-204	Provisioning Parts Breakdown	HRS-ROV-ILS-204
HRS-ROV-ILS-205	Supplementary Provisioning Technical Documentation	HRS-ROV-ILS-205
HRS-ROV-ILS-206	Special Tools and Test Equipment	HRS-ROV-ILS-206
HRS-ROV-ILS-207	Identification Plates	HRS-ROV-ILS-207
HRS-ROV-ILS-208	Controlled Goods List	HRS-ROV-ILS-208
HRS-ROV-ILS-209	Packaging, Labels and Codes	HRS-ROV-ILS-209
HRS-ROV-ILS-210	Repair and Overhaul Plan	HRS-ROV-ILS-210
HRS-ROV-ILS-211	Repair Manual	HRS-ROV-ILS-211
HRS-ROV-ILS-212	Quick Reference Cards	HRS-ROV-ILS-212
HRS-ROV-ILS-213	Top Level Assembly Drawing	HRS-ROV-ILS-213
HRS-ROV-ILS-214	Decals and Data Plates	HRS-ROV-ILS-214
HRS-ROV-ILS-215	Application for Spectrum Supportability	HRS-ROV-ILS-215

A3.2 CDRL Table Definitions

The following section defines the various blocks of information found on the CDRL forms:

BLOCK A – SYSTEM / ITEM

Provides the name of the System or Item for which the CDRL applies.

BLOCK B – CONTRACT / RFP NUMBER

Identifies the Contract or RFP for which the CDRL applies.

BLOCK C – SOW IDENTIFIER

Identifies the SOW for which the CDRL applies.

BLOCK D – DATA CATEGORY

Identifies the general category of the data for which the CDRL is being prepared.

BLOCK E – CONTRACTOR

Identifies the Contractor responsible for the delivery of the CDRL.

BLOCK 1 - ITEM NUMBER

The Item Number is a sequential three-digit number to uniquely identify the individual data item (CDRL number). Note that the 001-099 series is reserved to Project Management (PM) CDRLs, the 101-199 series is reserved to Systems Engineering (SE) CDRLs and the 201-299 series is reserved to Integrated Logistics Support (ILS) CDRLs.

BLOCK 2 - TITLE OR DESCRIPTION OF DATA

The title of the data item being referred to in this CDRL.

BLOCK 3 - SUBTITLE

This block contains the subtitle of the data item for the CDRL if the title requires further identification.

BLOCK 4 - AUTHORITY (DATA ITEM NUMBER)

Indicates the Data Item Description (DID) number to which this CDRL refers.

BLOCK 5 - CONTRACT REFERENCE

The specific paragraph number of the Contract Demand, Statement of Work, Request for Proposal, Specification, or other applicable document to assist in identifying the work effort associated with the data item.

BLOCK 6 – REQUIRING OFFICE

Identifies the technical office of primary interest responsible for defining the data requirement, reviewing, acceptance and approval of the data item, and ensuring the adequacy of the delivered data.

BLOCK 7 - INSPECTION

This block indicates the requirement for INSPECTION and ACCEPTANCE of the data. The following codes are used:

CODE	INSPECTION	ACCEPTANCE
SS	Source	Source
DD	Destination	Destination
SD	Source	Destination
DS	Destination	Source

If no applicable code is available for the data item, this block is marked as "N/A".

BLOCK 8 - APPROVAL CODE (APP CODE)

Indicates items of important data requiring specific advanced written approval, such as test plans, identified by placing an "A" in this field. These data may require submission of a preliminary draft prior to publication of a final document. When a preliminary draft is required, Block 16 must show the length of time for Government approval/disapproval and when final is to be delivered. Block 16 also indicates the extent of the approval requirements, eg, approval of technical content and format.

If advance approval is not required, this block is marked as "N/A".

BLOCK 9 - INPUT

Indicates if data are the integrated results of specific inputs from associated contractors by placing an "X" in this block. Otherwise the block is left blank.

BLOCK 10 - FREQUENCY

This block indicates the frequency of the delivered data. The following frequency codes are used:

ANPLY	Annually
ASGEN	As generated
ASREQ	As required
BI-MO	Every 2 months
BI-WK	Every 2 weeks
DAILY	Daily
MNTY	Monthly
ONE/R	One time with revisions
OTIME	One time
QRTLY	Quarterly
R/ASR	Revisions as required
SEMIA	Semi-annually
WKLY	Weekly

BLOCK 11 - AS OF DATE

For data items that are submitted only once, the "as of" date or associated constraint is indicated. The following abbreviations are used for the constraints:

ASGEN	As generated
ASREQ	As required
DACA	Days after contract award
MACA	Months after contract award
EOM	End of month
EOQ	End of quarter

If the as-of date is not applicable, leave this block blank.

BLOCK 12 - DATE OF 1ST SUBMISSION

The initial submission date or associated constraint for the 1st submission of the data item is indicated in this block using typical abbreviations as listed above under Block 11.

BLOCK 13 - DATE OF SUBSEQUENT SUBMISSION / EVENT

The date(s) of subsequent submission(s) or associated constraint(s) of the data item is indicated in this block. The abbreviations used for the constraints are as listed above under Block 11. If no subsequent submission or associated are not involved, this block is marked as "N/A".

BLOCK 14 - DISTRIBUTION AND ADDRESSEES

Indicates the addressees and the respective number of copies (hard copies and soft copies separately), for both the initial or original submissions (Sub-Block "Initial"), and for the final or subsequent submissions (Sub-Block "Final"), for which the data item is required.

Column A contains addresses. The number of initial hard and soft copies for each addressee (as applicable) is indicated in Column B – INITIAL – Hard Copy and Column B – FINAL – Soft Copy.

BLOCK 15 - TOTAL

Indicates the total number of copies (hard copies and soft copies separately) required for both the original submission and for the final submission.

A3.3 CDRL – Project Management Plan

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413			
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508			
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Management Data		E. CONTRACTOR			
1. ITEM NUMBER CDRL HRS-ROV-PM-001		2. TITLE OR DESCRIPTION OF DATA Project Management Plan (PMP)		3. SUBTITLE			
4. AUTHORITY (Data Item Number) DID HRS-ROV-PM-001		5. CONTRACT REFERENCE ANNEX A - SOW Para. 3.2.1		6. REQUIRING OFFICE			
7. INSPECTION DD	9. INPUT	10. FREQUENCY R/ASR	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES			
8. APP CODE N/A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16	A. ADDRESS		B. COPIES	
						DRAFT FINAL	
						Hard Copy	Soft Copy
16. REMARKS Block 12: A draft PMP must be submitted for review within thirty (30) calendar days after the Kick-off Meeting. Response Time: Comments on the PMP will be provided by Canada within fourteen (14) calendar days of receipt. Block 13: The updated PMP, addressing the comments from Canada, must be submitted for acceptance within fourteen (14) calendar days after the receipt of comments.				DND TA		1	1
15. TOTAL				1	1	1	1

A3.4 CDRL – Meeting Agenda

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413					
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508					
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Management Data		E. CONTRACTOR					
1. ITEM NUMBER CDRL HRS-ROV-PM-002		2. TITLE OR. DESCRIPTION OF DATA Meeting Agenda		3. SUBTITLE					
4. AUTHORITY (Data Item Number) DID HRS-ROV-PM-002		5. CONTRACT REFERENCE ANNEX A - SOW Para. 3.3.5.1.1		6. REQUIRING OFFICE					
7. INSPECTION DD	9. INPUT	10. FREQUENCY ASREQ	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
8. APP CODE N/A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16	A. ADDRESS		B. COPIES			
16. REMARKS Block 12: The Meeting Agenda must be submitted for review no later than seven (7) calendar days prior to each meeting. Response Time: Comments on the Meeting Agenda, and additions and deletions of discussion items, will be provided by Canada no later than five (5) calendar days of receipt. Block 13: The revised Meeting Agenda addressing the comments from Canada must be tabled at the meeting.									
				PSPC CA			1		1
				DND TA			1		1
				DND PA			1		1
15. TOTAL					3		3		

A3.5 CDRL – Meeting Minutes

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413				
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508				
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Management Data		E. CONTRACTOR				
1. ITEM NUMBER CDRL HRS-ROV-PM-003		2. TITLE OR DESCRIPTION OF DATA Meeting Minutes		3. SUBTITLE				
4. AUTHORITY (Data Item Number) DID HRS-ROV-PM-003		5. CONTRACT REFERENCE ANNEX A - SOW Para. 3.3.5.1.2		6. REQUIRING OFFICE				
7. INSPECTION DD	9. INPUT	10. FREQUENCY ASREQ	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES				
8. APP CODE N/A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16	A. ADDRESS		B. COPIES		
						DRAFT FINAL		
						Hard Copy	Soft Copy	
16. REMARKS Block 12: Meeting minutes must be submitted for review no later than seven (7) calendar days following each meeting. Response Time: Comments on the meeting minutes will be provided by Canada no later than seven (7) calendar days of receipt. Block 13: Revised meeting minutes addressing the comments from Canada must be submitted for approval no later than seven (7) calendar days of receipt of comments.				PSPC CA		1		1
				DND TA		1		1
				DND PA		1		1
				15. TOTAL		3		3

A3.6 CDRL – Operator Manuals

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413				
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508				
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR				
1. ITEM NUMBER CDRL HRS-ROV-ILS-201		2. TITLE OR DESCRIPTION OF DATA Operator Manuals		3. SUBTITLE				
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-201		5. CONTRACT REFERENCE ANNEX A - SOW Para. 4.2.1.1		6. REQUIRING OFFICE DND ILS Manager				
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES				
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16	A. ADDRESS	B. COPIES			
						DRAFT		FINAL
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS <u>Block 12.</u> The Contractor must provide draft English Operator Manuals for review by Canada no later than sixty-three (63) calendar days after the Kick off Meeting date. <u>Response Time:</u> Comments on the Operator Manuals will be provided by Canada no later than twenty-one (21) calendar days after receipt of draft submission. <u>Block 13:</u> The revised Operator Manuals addressing Canada's comments must be submitted for acceptance no later than twenty-one (21) calendar days after the receipt of Canada's comments. <u>Block 12 (Final):</u> The Contractor must provide draft Bilingual Operator Manuals for review by Canada no later than forty-two (42) calendar days after the acceptance of the English Operator Manuals. <u>Response Time:</u> Comments on the draft Bilingual Operator Manuals will be provided by Canada no later than fourteen (14) calendar days after receipt of the submission. <u>Block 13:</u> The revised Bilingual Operator Manuals, addressing Canada's comments must be provided to Canada for acceptance no later than fourteen (14) calendar days after the receipt of comments.				DND ILSM	1	1	2	2
				One with each HRS-ROV Large ROV Syst.	0	0	9	0
				One with each HRS-ROV Small ROV Syst.	0	0	79	0
				15. TOTAL	1	1	90	2

A3.7 CDRL – Initial Training Package

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413				
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508				
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR				
1. ITEM NUMBER CDRL HRS-ROV-ILS-202		2. TITLE OR DESCRIPTION OF DATA Initial Training Package		3. SUBTITLE				
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-202		5. CONTRACT REFERENCE ANNEX A - SOW Para. 4.2.1.2		6. REQUIRING OFFICE DND ILS Manager				
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES				
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16	A. ADDRESS	B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS <u>Block 12.</u> The Contractor must provide a draft English Initial Training Package for review by Canada within the fourteen (14) calendar days following the acceptance of the English version of the Operator Manuals and Repair Manual. <u>Response Time:</u> Comments on the Initial Training Package will be provided by Canada no later than twenty-one (21) calendar days after receipt of draft submission. <u>Block 13:</u> The revised Initial Training Package, addressing Canada's comments must be submitted for acceptance no later than fourteen (14) calendar days after the receipt of Canada's comments. <u>Block 12 (Final):</u> The Contractor must provide a draft Bilingual Initial Training Package for review by Canada within the thirty-four (35) calendar days after the acceptance of the Bilingual Operator Manuals Repair Manual. <u>Response Time:</u> Comments on the draft Bilingual Initial Training Package will be provided by Canada no later than fourteen (14) calendar days after receipt of the submission. <u>Block 13:</u> The revised Bilingual Initial Training Package, addressing Canada's comments must be provided to Canada for acceptance no later than fourteen (14) calendar days after the receipt of comments.				DND ILSM	1	1	2	2
				15. TOTAL	1	1	2	2

A3.8 CDRL – Illustrated Parts Manual

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413					
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508					
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR					
1. ITEM NUMBER CDRL HRS-ROV-ILS-203		2. TITLE OR DESCRIPTION OF DATA Illustrated Parts Manual		3. SUBTITLE					
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-203		5. CONTRACT REFERENCE ANNEX A - SOW Para. 4.3.1.1		6. REQUIRING OFFICE DND ILS Manager					
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16	A. ADDRESS		B. COPIES			
						DRAFT FINAL			
						Hard Copy	Soft Copy		
16. REMARKS Block 12: The Contractor must provide a draft English Illustrated Parts Manual for review by Canada no later than fifty-six (56) calendar days after the Kick off Meeting date. <u>Response Time:</u> Comments on the Illustrated Parts Manual will be provided by Canada no later than twenty-one (21) calendar days after receipt of draft submission. Block 13: The revised Illustrated Parts Manual addressing Canada's comments must be submitted for acceptance no later than twenty-one (21) calendar days before the IPC. Block 12 (Final): The Contractor must provide a draft Bilingual Illustrated Parts Manual for review by Canada no later than thirty-five (35) calendar days after the IPC. <u>Response Time:</u> Comments on the draft Bilingual Illustrated Parts Manual will be provided by Canada no later than fourteen (14) calendar days after receipt of the submission. Block 13: The revised Bilingual Illustrated Parts Manual, addressing Canada's comments must be provided to Canada for acceptance no later than fourteen (14) calendar days after the receipt of comments.				DND ILSM	1	1	2	2	
				15. TOTAL		1	1	2	2

A3.9 CDRL – Provisioning Parts Breakdown

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413					
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508					
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR					
1. ITEM NUMBER CDRL HRS-ROV-ILS-204		2. TITLE OR DESCRIPTION OF DATA Provisioning Parts Breakdown		3. SUBTITLE					
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-204		5. CONTRACT REFERENCE ANNEX A - SOW Para. 4.3.1.2		6. REQUIRING OFFICE DND ILS Manager					
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16	A. ADDRESS		B. COPIES			
16. REMARKS <u>Block 12:</u> The Provisioning Parts Breakdown must be submitted for evaluation and review at the same time as the draft Illustrated Parts Manual <u>Response Time:</u> Comments on the Provisioning Parts Breakdown will be provided by Canada within twenty-one (21) calendar days of receipt of submission. <u>Block 13:</u> The revised Provisioning Parts Breakdown, addressing Canada comments must be submitted for acceptance no later than twenty-one (21) calendar days before the IPC. A new submission of Provisioning Parts Breakdown must be provided if additional revisions/additions are required, once the IPC is complete.									
				DND ILSM		2	1	2	2
15. TOTAL				2	1	2	2		

A3.10 CDRL – Supplementary Provisioning Technical Documentation

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413					
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508					
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR					
1. ITEM NUMBER CDRL HRS-ROV-ILS-205		2. TITLE OR DESCRIPTION OF DATA Supplementary Provisioning Technical Documentation		3. SUBTITLE					
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-205		5. CONTRACT REFERENCE ANNEX A - SOW Para. 4.3.1.3		6. REQUIRING OFFICE DND ILS Manager					
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16	A. ADDRESS		B. COPIES			
<p>16. REMARKS</p> <p><u>Block 12:</u> The Supplementary Provisioning Technical Documentation must be submitted for evaluation and review together with the Provisioning Parts Breakdown.</p> <p><u>Response Time:</u> Comments on the Supplementary Provisioning Technical Documentation will be provided by Canada no later than twenty-one (21) calendar days after receipt, and will be available for the start of the Initial Provisioning Conference.</p> <p><u>Block 13:</u> The revised Supplementary Provisioning Technical Documentation, addressing Canada comments must be submitted for acceptance no later than twenty-one (21) calendar days before the IPC.</p> <p>The revised Supplementary Provisioning Technical Documentation addressing Canada comments and changes resulting from decisions taken during the Initial Provisioning Conference must be submitted for acceptance no later than twenty-one (21) calendar days from the end date of the Initial Provisioning Conference.</p>									
				DND ILSM		1	2	2	2
15. TOTAL				1	2	2	2		

A3.11 CDRL – Special Tools and Test Equipment

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413				
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508				
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR				
1. ITEM NUMBER CDRL HRS-ROV-ILS-206		2. TITLE OR DESCRIPTION OF DATA Special Tools & Test Equipment List		3. SUBTITLE				
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-206		5. CONTRACT REFERENCE ANNEX A - SOW Para. 4.3.1.4		6. REQUIRING OFFICE DND ILS Manager				
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES				
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16					
16. REMARKS <u>Block 12:</u> The Special Tools and Test Equipment List must be submitted for evaluation and review no later than forty-two (42) calendar days after the kick-off meeting. <u>Response Time:</u> Comments on the Special Tools and Test Equipment List will be provided by Canada within fourteen (14) calendar days of receipt of submission. <u>Block 13:</u> The revised Special Tools and Test Equipment List addressing the comments from Canada, must be submitted for acceptance within fourteen (14) calendar days of receipt of comments.				A. ADDRESS	B. COPIES			
				DRAFT		FINAL		
				Hard Copy	Soft Copy	Hard Copy	Soft Copy	
				DND ILSM	1	1	2	2
15. TOTAL				1	1	2	2	

A3.12 CDRL – Identification Plates

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413							
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508							
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR							
1. ITEM NUMBER CDRL HRS-ROV-ILS-207		2. TITLE OR DESCRIPTION OF DATA Identification Plates		3. SUBTITLE							
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-207		5. CONTRACT REFERENCE ANNEX A - SOW Para. 4.7		6. REQUIRING OFFICE DND ILS Manager							
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES							
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16								
16. REMARKS <u>Block 12 (Template)</u> : The Contractor must provide all draft Identification Plate design templates for review by Canada no later than fourteen (14) calendar days after the Kick off Meeting date. <u>Response Time</u> : Comments on the Identification Plates design templates will be provided by Canada no later than fourteen (14) calendar days after receipt of draft design submission. <u>Block 13</u> : The revised Identification Plate design templates, addressing Canada's comments must be submitted for acceptance no later than fourteen (14) calendar days after the receipt of Canada's comments. <u>Block 12 (Final)</u> : The Contractor must provide all draft populated Identification Plate designs for review by Canada no later than twenty-eight (28) calendar days after acceptance of the Identification Plates template design. <u>Response Time</u> : Comments on the draft populated Identification Plate designs will be provided by Canada no later than twenty-one (21) calendar days after receipt of draft submission. <u>Block 13</u> : The revised Identification Plates designs, addressing Canada's comments, must be submitted for acceptance no later than fourteen (14) calendar days after the receipt of Canada's comments.				A. ADDRESS		B. COPIES					
								DRAFT		FINAL	
								Hard Copy	Soft Copy	Hard Copy	Soft Copy
								1	1	2	2
15. TOTAL				1	1	2	2				

A3.13 CDRL – Controlled Goods List

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413							
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508							
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR							
1. ITEM NUMBER CDRL HRS-ROV-ILS-208		2. TITLE OR DESCRIPTION OF DATA Controlled Goods List		3. SUBTITLE							
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-208		5. CONTRACT REFERENCE ANNEX A - SOW Para. 4.8		6. REQUIRING OFFICE DND ILS Manager							
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES							
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16								
16. REMARKS <u>Block 12:</u> The Controlled Goods List must be submitted for evaluation and review no later than fifty-six (56) calendar days following the kick-off meeting. <u>Response Time:</u> Comments on the Controlled Goods List will be provided by Canada within fourteen (14) calendar days of receipt of submission. <u>Block 13:</u> The revised Controlled Goods List, addressing the comments from Canada, must be submitted for acceptance within fourteen (14) calendar days of receipt of comments.				A. ADDRESS		B. COPIES					
				DND ILSM		DRAFT		FINAL			
						Hard Copy	Soft Copy	Hard Copy	Soft Copy		
								1	1	2	2
15. TOTAL				1	1	2	2				

A3.14 CDRL – Packaging Labels and Codes

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413				
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508				
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR				
1. ITEM NUMBER CDRL HRS-ROV-ILS-209		2. TITLE OR DESCRIPTION OF DATA Packaging, Labels and Codes		3. SUBTITLE				
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-209		5. CONTRACT REFERENCE ANNEX A - SOW Para. 4.10		6. REQUIRING OFFICE DND ILS Manager				
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES				
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16	A. ADDRESS	B. COPIES			
						DRAFT		FINAL
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS <u>Block 12:</u> The Packaging, Labels and Codes must be submitted for evaluation and review within ninety-eight (98) calendar days after the Kick-off Meeting. <u>Response Time:</u> Comments on Packaging, Labels and Codes will be provided by Canada within twenty-one (21) calendar days of receipt of submission. <u>Block 13:</u> The revised Packaging, Labels and Codes, addressing the comments from Canada, must be submitted for acceptance within fourteen (14) calendar days of receipt of comments. Revisions/Additions to the Packaging, Labels and Codes must also be provided once a range of spares are chosen from the IPC by DND to support the equipment.				DND ILSM	1	1	2	2
				15. TOTAL	1	1	2	2

A3.15 CDRL – Repair & Overhaul Plan

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413				
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508				
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR				
1. ITEM NUMBER CDRL HRS-ROV-ILS-210		2. TITLE OR DESCRIPTION OF DATA Repair and Overhaul Plan		3. SUBTITLE				
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-210		5. CONTRACT REFERENCE ANNEX A - SOW Para. 4.11		6. REQUIRING OFFICE DND ILS Manager				
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES				
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16					
16. REMARKS <u>Block 12:</u> The Repair and Overhaul Plan must be submitted for evaluation and review no later than forty-two (42) calendar days following the kick-off meeting. <u>Response Time:</u> Comments on the Repair and Overhaul Plan will be provided by Canada within fourteen (14) calendar days of receipt of submission. <u>Block 13:</u> The revised Repair and Overhaul Plan, addressing the comments from Canada, must be submitted for acceptance within fourteen (14) calendar days of receipt of comments.				A. ADDRESS	B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
				DND ILSM	1	1	2	2
15. TOTAL				1	1	2	2	

A3.16 CDRL – Repair Manual

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413					
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508					
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR					
1. ITEM NUMBER CDRL HRS-ROV-ILS-211		2. TITLE OR. DESCRIPTION OF DATA Repair Manual		3. SUBTITLE					
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-211		5. CONTRACT REFERENCE ANNEX A - SOW Para. 4.2.1.3		6. REQUIRING OFFICE DND ILS Manager					
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16						
8. APP CODE A				A. ADDRESS		B. COPIES			
						DRAFT			
						FINAL			
						Hard Copy	Soft Copy		
						Hard Copy	Soft Copy		
16. REMARKS <u>Block 12:</u> The Contractor must provide a draft English Repair Manual for review by Canada no later than forty-two (42) calendar days after the Kick off Meeting date. <u>Response Time:</u> Comments on the draft English Repair Manual will be provided by Canada no later than twenty-one (21) calendar days after receipt of draft submission. <u>Block 13:</u> The revised draft English Repair Manual, addressing Canada's comments must be submitted for acceptance no later than twenty-one (21) calendar days after the receipt of Canada's comments. <u>Block 12 (Final):</u> The Contractor must provide a draft Bilingual Repair Manual for review by Canada no later than forty-two (42) calendar days after the acceptance of the English Repair Manual <u>Response Time:</u> Comments on the draft Bilingual Repair Manual will be provided by Canada no later than fourteen (14) calendar days after receipt of the submission. <u>Block 13:</u> The revised Bilingual Repair Manual, addressing Canada's comments must be provided to Canada for acceptance no later than fourteen (14) calendar days after the receipt of comments.				DND ILSM		1	1	2	2
15. TOTAL				1	1	2	2		

A3.17 CDRL - Quick Reference Cards

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413				
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508				
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR				
1. ITEM NUMBER CDRL HRS-ROV-ILS-212		2. TITLE OR DESCRIPTION OF DATA Quick Reference Cards		3. SUBTITLE				
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-212		5. CONTRACT REFERENCE ANNEX A - SOW Para. 4.2.1.4		6. REQUIRING OFFICE DND ILS Manager				
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES				
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16	A. ADDRESS	B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
<p>16. REMARKS</p> <p><u>Block 12:</u> The Contractor must provide a draft English Quick Reference Cards for review by Canada at the same time as the submission of the Operator Manuals.</p> <p><u>Response Time:</u> Comments on the Quick Reference Cards will be provided by Canada no later than twenty-one (21) calendar days after receipt of the draft submission.</p> <p><u>Block 13:</u> The revised Quick Reference Cards addressing Canada's comments must be submitted for acceptance no later than twenty-one (21) calendar days after the receipt of Canada's comments.</p> <p><u>Block 12 (Final):</u> The Contractor must provide a draft Bilingual Quick Reference Cards for review by Canada at the same time as the submission of the Bilingual Operator Manuals.</p> <p><u>Response Time:</u> Comments on the draft Bilingual Quick Reference Cards will be provided by Canada no later than fourteen (14) calendar days after receipt of the submission.</p> <p><u>Block 13:</u> The revised Bilingual Quick Reference Cards, addressing Canada's comments must be provided to Canada for acceptance no later than fourteen (14) calendar days after the receipt of comments.</p>				DND ILSM	1	1	2	2
				Issued with each HRS-ROV	0	0	9	0
				Issued with each Small HRS-ROV	0	0	79	0
				15. TOTAL	1	1	90	2

A3.18 CDRL – Top Level Assembly Drawing

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413				
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508				
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR				
1. ITEM NUMBER CDRL HRS-ROV-ILS-213		2. TITLE OR DESCRIPTION OF DATA Top Level Assembly Drawing		3. SUBTITLE				
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-213		5. CONTRACT REFERENCE ANNEX A - SOW Para. 3.3.2.2.1		6. REQUIRING OFFICE DND ILS Manager				
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES				
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUB-SUBMISSION See Block 16	A. ADDRESS	B. COPIES			
					DRAFT		FINAL	
					Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS <u>Block 12: First Submission:</u> The Contractor must provide a draft Top Level Assembly Drawing (TLAD) for review by Canada during the Kick-Off Meeting (Annex A – SOW para 3.3.2) <u>Response Time:</u> Comments on the TLAD will be provided by Canada no later than seven (7) calendar days after receipt of draft submission. <u>Block 13:</u> The revised TLAD, addressing Canada's comments must be submitted for acceptance no later than seven (7) calendar days following receipt of comments from Canada.				DND ILSM	1	1	2	2
				15. TOTAL	1	1	2	2

A3.19 CDRL – Decals and Data Plates

CONTRACT DATA REQUIREMENTS LIST					DND Form 1413					
A. SYSTEM / ITEM HRS-ROV					B. CONTRACT / RFP NUMBER W8476-175508					
C. SOW IDENTIFIER HRS-ROV SOW			D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR					
1. ITEM NUMBER CDRL HRS-ROV-ILS-214		2. TITLE OR DESCRIPTION OF DATA Decals and Data Plates			3. SUBTITLE					
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-214			5. CONTRACT REFERENCE ANNEX A - SOW Para. 4.9.4		6. REQUIRING OFFICE DND ILS Manager					
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16		14. DISTRIBUTION and ADDRESSEES					
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16		A. ADDRESS		B. COPIES			
							DRAFT FINAL			
							Hard Copy	Soft Copy	Hard Copy	Soft Copy
16. REMARKS <u>Block 12 (Template)</u> . The Contractor must provide a draft Decals and Data Plates design for review by Canada no later than twenty-eight (28) calendar days after the Kick off Meeting date. <u>Response Time</u> : Comments on the Decals and Data Plates design will be provided by Canada no later than fourteen (14) calendar days after receipt of draft design submission. <u>Block 13</u> : The revised Decals and Data Plates addressing Canada's comments must be submitted for acceptance no later than fourteen (14) calendar days after the receipt of Canada's comments. <u>Block 12 (Final)</u> : The Contractor must provide all draft Bilingual populated Decals and Data Plates designs for review by Canada no later than thirty-five (35) calendar days after acceptance of the Decals and Data Plates template design. <u>Response Time</u> : Comments on the Bilingual populated Decals and Data Plates designs will be provided by Canada no later than twenty-one (21) calendar days after receipt of draft submission. <u>Block 13</u> : The revised Bilingual Decals and Data Plates designs, addressing Canada's comments, must be submitted for acceptance no later than fourteen (14) calendar days after the receipt of Canada's comments.					DND ILSM		1	1	2	2
15. TOTAL					1	1	2	2		

A3.20 CDRL – Application for Spectrum Supportability

CONTRACT DATA REQUIREMENTS LIST				DND Form 1413					
A. SYSTEM / ITEM HRS-ROV				B. CONTRACT / RFP NUMBER W8476-175508					
C. SOW IDENTIFIER HRS-ROV SOW		D. DATA CATEGORY Integrated Logistics Support		E. CONTRACTOR					
1. ITEM NUMBER CDRL HRS-ROV-ILS-215		2. TITLE OR DESCRIPTION OF DATA Application for Spectrum Supportability		3. SUBTITLE					
4. AUTHORITY (Data Item Number) DID HRS-ROV-ILS-215		5. CONTRACT REFERENCE ANNEX A - SOW Para. 4.12		6. REQUIRING OFFICE DND ILS Manager					
7. INSPECTION DD	9. INPUT	10. FREQUENCY ONE/R	12. DATE OF 1 st SUBMISSION See Block 16	14. DISTRIBUTION and ADDRESSEES					
8. APP CODE A		11. AS OF DATE N/A	13. DATE OF SUB SUBMISSION See Block 16	A. ADDRESS		B. COPIES			
16. REMARKS <u>Block 12:</u> The Application for Spectrum Supportability must be submitted for review no later than twenty-one (21) calendar days after the Kick-off Meeting. <u>Response Time:</u> Comments on the Application for Spectrum Supportability will be provided by Canada no later than fourteen (14) calendar days of receipt. <u>Block 13:</u> The revised Application for Spectrum Supportability, addressing Canada comments must be submitted for acceptance no later than fourteen (14) calendar days after the receipt of comments.									
				DND TA		1	1	2	2
15. TOTAL				1	1	2	2		

A4.0 APPENDIX: DATA ITEM DESCRIPTION

A4.1 DID Item List

DID #	Title	CDRL #
HRS-ROV-PM-001	Project Management Plan	HRS-ROV-PM-001
HRS-ROV-PM-002	Meeting Agenda	HRS-ROV-PM-002
HRS-ROV-PM-003	Meeting Minutes	HRS-ROV-PM-003
HRS-ROV-ILS-201	Operator Manuals	HRS-ROV-ILS-201
HRS-ROV-ILS-202	Initial Training Package	HRS-ROV-ILS-202
HRS-ROV-ILS-203	Illustrated Parts Manuals	HRS-ROV-ILS-203
HRS-ROV-ILS-204	Provisioning Parts Breakdown	HRS-ROV-ILS-204
HRS-ROV-ILS-205	Supplementary Provisioning Technical Documentation	HRS-ROV-ILS-205
HRS-ROV-ILS-206	Special Tools and Test Equipment	HRS-ROV-ILS-206
HRS-ROV-ILS-207	Identification Plates	HRS-ROV-ILS-207
HRS-ROV-ILS-208	Controlled Goods List	HRS-ROV-ILS-208
HRS-ROV-ILS-209	Packaging, Labels and Codes	HRS-ROV-ILS-209
HRS-ROV-ILS-210	Repair and Overhaul Plan	HRS-ROV-ILS-210
HRS-ROV-ILS-211	Repair Manual	HRS-ROV-ILS-211
HRS-ROV-ILS-212	Quick Reference Cards	HRS-ROV-ILS-212
HRS-ROV-ILS-213	Top Level Assembly Drawing	HRS-ROV-ILS-213
HRS-ROV-ILS-214	Decals and Data Plates	HRS-ROV-ILS-214
HRS-ROV-ILS-215	Application for Spectrum Supportability	HRS-ROV-ILS-215

A4.2 DID Table Definitions

The following section defines the various blocks of information found on the Data Item Description (DID) forms:

BLOCK 1 – TITLE

The title of the data item for the DID.

BLOCK 2 - IDENTIFICATION NUMBER

The Data Item Description (DID) number, consisting of a sequential three-digit number and prefixed with an abbreviation code, to uniquely identify the DID. Note that the 001-099 series is reserved to Project Management (PM) DIDs, the 101-199 series is reserved to Systems Engineering (SE) DIDs and the 201-299 series is reserved to Integrated Logistics Support (ILS) DIDs. The abbreviation codes used for the prefix are:

- “PM” for Project Management
- “SE” for Systems Engineering
- “ILS” for Integrated Logistics Support

BLOCK 3 - DESCRIPTION

Provides a general description of the data content requirements.

BLOCK 4 - APPROVAL DATE

Indicates the date of the originator's approval of the DID.

BLOCK 5 - OFFICE OF PRIMARY INTEREST (OPI)

The office of primary interest for the review, acceptance and approval of the data item.

BLOCK 6 - GIDEP APPLICABLE

An “X” indicates that the data is to be submitted by a Government organization or the Contractor to the Government/Industry Data Exchange Program (GIDEP). Otherwise the block is left blank.

BLOCK 7 - APPLICATION / INTERRELATIONSHIP

Provides the application details and interrelationship of the data item to other DIDs or documents.

BLOCK 8 - ORIGINATOR

Indicates the originator's office responsible for the DID.

BLOCK 9 - APPLICABLE FORMS

Indicates all form associated with the DID.

BLOCK 10 - PREPARATION INSTRUCTIONS

Provides the preparation instructions, and format and content requirements for the data.

A4.3 DID – Project Management Plan

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Project Management Plan (PMP)	2. IDENTIFICATION NUMBER DID HRS-ROV-PM-001	
3. DESCRIPTION The Project Management Plan (PMP) is the top-level plan that describes the Contractor's strategy, plans, methodologies and processes for meeting the requirements of the Contract.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DND/DGLEPM/DCSEM 9	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This Data Item Description (DID) contains the format, content and preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the ANNEX A. Para. 3.2		
8. ORIGINATOR DND / DGLEPM / DCSEM 9-3	9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS		
10.1. FORMAT		
10.1.1. The PMP must be prepared in the Contractor's format.		
10.2. CONTENT		
10.2.1. The PMP must describe the management processes, administrative procedures and organizational structure that will be used to manage the Work of the Contractor. The PMP must further detail the practices and procedures for project scheduling, planning, organizing, directing, executing, communicating, reporting, managing risk, managing environmental health and safety issues and impacts, managing information, and closing of action items for all Work required by the Contract. The PMP must address in detail the above points through the following:		
10.2.1.1. Overview:		
10.2.1.1.1. Purpose, Background, Scope and Objectives;		
10.2.1.1.2. Assumptions, Constraints and Risks;		
10.2.1.1.3. All Project Deliverables;		
10.2.1.1.4. Organization Summary; and		
10.2.1.1.5. Schedule Summary.		
10.2.1.2. Organization:		
10.2.1.2.1. Project Management Organizational Chart, consisting of internal and external organizations as it pertains to this Contract;		
10.2.1.3. Management Processes:		
10.2.1.3.1. Project Management Approach and Procedures;		
10.2.1.3.2. Schedule Control;		
10.2.1.3.3. Quality Assurance;		
10.2.1.3.4. Reporting;		
10.2.1.3.5. Communications;		
10.2.1.3.6. Risk Management (RM);		
10.2.1.3.7. Environmental, Health and Safety Issues Management;		
10.2.1.3.8. Information Management (IM); and		
10.2.1.3.9. Change Control Processes.		

A4.4 DID – Meeting Agenda

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Meeting Agenda	2. IDENTIFICATION NUMBER DID HRS-ROV-PM-002	
3. DESCRIPTION Meeting Agendas must set forth the venue and identify the discussion items to be covered at meetings.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DND/DGLEPM/DCSEM 9	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This Data Item Description (DID) contains the format, content and preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the ANNEX A. Para. 3.3.5.1.1		
8. ORIGINATOR DND / DGLEPM / DCSEM 9-3	9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS		
<ul style="list-style-type: none"> 10.1. FORMAT <ul style="list-style-type: none"> 10.1.1. The Meeting Agenda must be in the Contractor's format. 10.2. CONTENT <ul style="list-style-type: none"> 10.2.1. The Meeting Agenda must set forth the venue, identify all requirements and list the discussion items to be covered at the meeting. 10.2.2. Venue. The Meeting Agenda must address the venue as follows: <ul style="list-style-type: none"> 10.2.2.1. Meeting Identification Number; 10.2.2.2. Purpose; 10.2.2.3. Date, time and location; and 10.2.2.4. Attendees. 10.2.3. Discussion items. The Meeting Agenda must address the discussion items through the following sections: <ul style="list-style-type: none"> 10.2.3.1. Opening Remarks; 10.2.3.2. Agenda Review; 10.2.3.3. Review of Previous Minutes; 10.2.3.4. Opened Discussion Items; 10.2.3.5. New Discussion Items; 10.2.3.6. Review of Action Items; 10.2.3.7. Next Venue; and 10.2.3.8. Closing Remarks. 		

A4.5 DID – Meeting Minutes

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Meeting Minutes	2. IDENTIFICATION NUMBER DID HRS-ROV-PM-003	
3. DESCRIPTION Meeting Minutes must consist of the detailed records of proceedings, discussions, decisions and action items from meetings.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DND/DGLEPM/DCSEM 9	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This Data Item Description (DID) contains the format, content and preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the ANNEX A. Para. 3.3.5.1.2		
8. ORIGINATOR DND / DGLEPM / DCSEM 9-3	9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS		
10.1. FORMAT		
10.1.1. The Meeting Minutes must be in the Contractor's format.		
10.2. CONTENT		
10.2.1. The Meeting Minutes must contain the detailed records of proceedings, discussions, decisions and action items from the meeting and be presented through the following sections:		
10.2.1.1. General – consisting of meeting identification number, purpose, date, time and location;		
10.2.1.2. Attendees, consisting of the organization each person represents, and the identification of the Chairperson(s);		
10.2.1.3. Opening Remarks;		
10.2.1.4. Status of the HRS-ROV(s), if applicable to the purpose of the meeting;		
10.2.1.5. Support Performance Review, consisting of problems and issues, if applicable to the purpose of the meeting;		
10.2.1.6. Action Item Report - used to monitor issues, assign responsibility, direct action and track status, history, and progress, and must consisting of:		
10.2.1.6.1. Item #; date initiated; required action; assigned actionee; target completion date; cross-reference to all related action items.		
10.2.1.6.2. Action Item Report must be updated with each meeting and must consisting of:		
10.2.1.6.2.1. Action Item current status and the actual date completed;		
10.2.1.7. Next Venue;		
10.2.1.8. Closing Remarks;		

A4.6 DID – Operator Manuals

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Operator Manuals	2. IDENTIFICATION NUMBER DID HRS-ROV-ILS-201	
3. DESCRIPTION The Operator Manuals contain all the essential information required to describe the safe and correct operative procedures and operator maintenance associated with the HRS-ROV.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST HRS-ROV SYSTEM ILS Manager	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This Data Item Description (DID) contains the format, content and preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the ANNEX A. Para. 4.2.1.1 and C-01-100-100/AG-005 Acceptance of Commercial and Foreign Government Publications as Adopted Publications 1996-02-29.		
8. ORIGINATOR HRS-ROV SYSTEM ILS Technician	9. APPLICABLE FORMS	
10 PREPARATION INSTRUCTIONS		
10.1 FORMAT		
10.1.1 The Operator Manuals must be prepared in the Contractor's format while being in full conformance with the above-stated issue of C-01-100-100/AG-005.		
10.1.2 The National Defence Identification Number (NDID), provided to the Contractor by DND, must be placed on the top right corner of all the pages of the manual.		
10.1.3 The accepted Operator Manual's hard copies must be:		
10.1.3.1 furnished with resistant flexible covers;		
10.1.3.2 printed on paper with these characteristics:		
10.1.3.2.1 Weight: at least 90g/m ² (24 lb.); and,		
10.1.3.2.2 Brightness: at least 96		
10.1.3.3 Bound in a manner that will allow the manual to remain open on a flat surface at any of the pages without pages flipping over inadvertently; and,		
10.1.3.4 Of dimensions that will allow the Operator Manuals to be packed in the HRS-ROV's carrying case (see Appendix A1.0) without needing to be folded or otherwise distorted from flat.		
10.2 CONTENT		
10.2.1 The Operator Manuals must cover the following topics, and others judged pertinent by the Contractor:		
10.2.1.1 General Description/Equipment Overview;		
10.2.1.2 Pre-use testing/inspection;		
10.2.1.3 Preparation and set up for use;		
10.2.1.4 Use and operation;		
10.2.1.5 Operator Maintenance;		
10.2.1.6 Storage, preparation for travel, preservation, and handling procedures		
10.2.1.7 Safety/Hazardous material issues;		
10.2.1.8 Products Containing Mercury (if applicable)		
10.2.1.8.1 The Operator Manuals must include information on part numbers containing mercury, location, type of mercury, manufacturer's information, mercury content, and MSDS information.		

10.2.1.8.2 The Operator Manuals must include a written work procedure for processes involving the safe handling of mercury-containing equipment, components and materials.

10.2.1.8.3 The Operator Manuals must identify procedures for mercury spills clean-ups and disposal procedures. The work procedure must identify proper Personal Protective Equipment (PPE) in the case of a spill.

10.2.2 The material covered in 10.2.1 above must be amplified by illustrations, line drawings, and high quality pictures as appropriate.

10.3 ELECTRONIC FORMAT

10.3.1 The Operator Manuals must be provided as a PDF file with searchable text that matches the printed publication's format and layout. Links, bookmarks and thumbnails are to be included in the PDF file. All references made to a specific paragraph, figure, appendix must be appropriately linked.

10.3.2 Viewing the PDF: pages, regardless of size, containing text and illustrations in landscape, must be rotated for electronic viewing and reading in landscape.

10.3.3 The Operator Manual PDF and its native file must be submitted on CD or DVD media and be labelled as follows:

10.3.3.1 The project name: HRS-ROV;

10.3.3.2 The contract number: W8476-175508;

10.3.3.3 The Subject Matter: Operator Manuals;

10.3.3.4 The DID number: HRS-ROV-ILS-201;

10.3.3.5 The Revision number; and,

10.3.3.6 The date of delivery.

A4.7 DID – Initial Training Package

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Initial Training Package	2. IDENTIFICATION NUMBER DID HRS-ROV-ILS-202	
3. DESCRIPTION The Initial Training Package contains all the information required to teach the operation, maintenance and storage of the equipment.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST HRS-ROV SYSTEM ILS Manager	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This Data Item Description (DID) contains the format, content and preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the ANNEX A. Para. 4.2.1.2.		
8. ORIGINATOR HRS-ROV SYSTEM ILS Technician	9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS		
10.1. FORMAT		
10.1.1. The Initial Training Package must be provided in MS PowerPoint Format.		
10.2. CONTENT		
10.2.1. The Initial Training Package must be provided in English and Canadian French, and must be broken into two (2) categories: Operator Training and Technician Training.		
10.2.2. The Initial Training Package must consist of the training documentation as follow:		
10.2.2.1. The training documentation is the material required for instruction and learning, this includes:		
10.2.2.1.1. Lesson plan; and		
10.2.2.1.2. Student handouts.		
10.2.2.2. The following topics must be addressed in the content of the Operator Training package portion:		
10.2.2.2.1. Equipment overview;		
10.2.2.2.2. Pre-use testing/inspection;		
10.2.2.2.3. Equipment set-up and deployment;		
10.2.2.2.4. Use and operation (theory and practical);		
10.2.2.2.5. Operator maintenance and care;		
10.2.2.2.6. Operator Troubleshooting;		
10.2.2.2.7. Storage, and preparation to travel; and		
10.2.2.2.8. Safety - personnel, equipment safety issues and hazardous material issues.		
10.2.2.3. The following topics must be addressed in the content of the Technician Training package portion:		
10.2.2.3.1. System Equipment overview;		
10.2.2.3.2. Pre-use testing/inspection;		
10.2.2.3.3. Use and operation for maintenance purposes;		
10.2.2.3.4. Troubleshooting and fault finding;		
10.2.2.3.5. Preventive and Corrective maintenance procedures;		
10.2.2.3.6. Special tools and test equipment;		
10.2.2.3.7. Safety – personnel, equipment safety issues and hazardous material issues; and		
10.2.2.3.8. Practical maintenance training.		
10.2.3. The Initial Training Package must not introduce new information and procedures relative to the <i>Operator Manual</i> and <i>Repair Manual</i> : they are the master documents on how to use and maintain the HRS-ROV.		

10.3. ELECTRONIC FORMAT

10.3.1. The Initial Training Package in MS PowerPoint Format must be submitted on CD or DVD media, and be labelled as follows:

10.3.1.1. The project name: HRS-ROV;

10.3.1.2. The contract number: W8476-175508

10.3.1.3. The Subject Matter: Initial Training Package;

10.3.1.4. The DID number: HRS-ROV-ILS-202;

10.3.1.5. The Revision number;

10.3.1.6. The date of delivery.

A4.8 DID – Illustrated Parts Manual

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Illustrated Parts Manual	2. IDENTIFICATION NUMBER DID HRS-ROV-ILS-203	
3. DESCRIPTION The Illustrated Parts Manual contains all the necessary information to positively identify all parts of the HRS-ROV.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST HRS-ROV SYSTEM ILS Manager	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This Data Item Description (DID) contains the format, content and preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the ANNEX A. Para. 4.3.1.1; and D-01-100-207/SF-002 <i>Preparation of Interim Illustrated Parts Manuals for Land Equipment.</i>		
8. ORIGINATOR HRS-ROV SYSTEM ILS Technician	9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS		
10.1 FORMAT		
10.1.1 The format of the Illustrated Parts Manual must be IAW D-01-100-207/SF-002.		
10.1.2 Photographs must not be used as illustrations in the IPM.		
10.1.3 The accepted Illustrated Parts Manual's hard copies must be:		
10.1.3.1 Furnished with resistant flexible covers;		
10.1.3.2 Printed on paper with these characteristics:		
10.1.3.2.1 Weight: at least 90g/m ² ; and,		
10.1.3.2.2 Brightness: at least 96; and,		
10.1.3.3 Bound in a manner that will allow the manual to remain open while on a flat surface at all pages without pages flipping over inadvertently.		
10.2 CONTENT		
10.2.1 The content must be IAW D-01-100-207/SF-002. The drawings must be sequenced as per the PPB breakdown of assemblies. That is, a major assembly must be fully broken down before the next major assembly is shown.		
10.2.2 The Illustrated Parts Manual must contain illustrations, exploded views, and drawings and associated lists necessary for the proper identification of all parts, assemblies, and special equipment to the Lowest Replaceable Unit IAW the Maintenance Concept of the HRS-ROV.		
10.2.3 The exploded views contained in the Illustrated Parts Manual must amplify the relationship between all parts and assemblies to facilitate repair of the HRS-ROV and the replacement of parts and assemblies down to the LRU.		
10.2.4 The National Defence Index of Documentation (NDID), number provided to the Contractor by DND, must be printed on the top right corner of each page of the manual.		
10.3 ELECTRONIC FORMAT:		
10.3.1 The electronic file format must be PDF, with searchable text, with pages rotated as needed for normal viewing on screen.		
10.3.2 The Illustrated Parts Manual, in PDF format and its native file, must be submitted on CD or DVD media,		

and labelled as follows:

- 10.3.2.1 The project name: HRS-ROV;
- 10.3.2.2 The contract number: W8476-175508;
- 10.3.2.3 The Subject Matter: Illustrated Parts Manual;
- 10.3.2.4 The DID number: HRS-ROV-ILS-203;
- 10.3.2.5 The Revision number; and,
- 10.3.2.6 The date of delivery.

A4.9 DID – Provisioning Parts Breakdown

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Provisioning Parts Breakdown	2. IDENTIFICATION NUMBER DID HRS-ROV-ILS-204	
3. DESCRIPTION The Provisioning Parts Breakdown provides a top down breakdown of the equipment in the configuration it is being procured in. This breakdown is accomplished by listing all parts included in the end item in a lateral and descending family tree/generation breakdown. In this breakdown, all assemblies, subassemblies and parts are listed in relation to the next higher assembly.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST HRS-ROV SYSTEM ILS Manager	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This Data Item Description (DID) contains the format, content and preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the ANNEX A. Para. 4.3.1.2 and D-01-100-214/SF-000.		
8. ORIGINATOR HRS-ROV SYSTEM ILS Technician	9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS		
10.1. FORMAT		
10.1.1. The Provisioning Parts Breakdown (PPB) must be prepared a Microsoft Excel Spreadsheet in accordance with CF Specification D-01-100-214/SF-000.		
10.2. CONTENT		
10.2.1. The Provisioning Parts Breakdown must contain the data elements specified in all mandatory fields of Figure 5, column PPB, of D-01-100-214/SF-000 for each item considered for provisioning.		
10.3. ELECTRONIC FORMAT		
10.3.1. The Provisioning Parts Breakdown in a Microsoft Excel Spreadsheet, must be submitted on CD or DVD media, and be labelled as follows:		
10.3.1.1. The project name: HRS-ROV;		
10.3.1.2. The contract number: W8476-175508		
10.3.1.3. The Subject Matter: Provisioning Parts Breakdown;		
10.3.1.4. The DID number: HRS-ROV-ILS-204;		
10.3.1.5. The Revision number;		
10.3.1.6. The date of delivery.		

A4.10 DID – Supplementary Provisioning Technical Documentation

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Supplementary Provisioning Technical Documentation	2. IDENTIFICATION NUMBER DID HRS-ROV-ILS-205	
3. DESCRIPTION The Supplementary Provisioning Technical Documentation (SPTD) fully identifies and describes part(s) that may be catalogued.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST HRS-ROV SYSTEM ILS Manager	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This Data Item Description (DID) contains the format, content and preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the ANNEX A. Para. 4.3.1.3 and D-01-100-214/SF-000 and D-01-400-001/SG-000 section 7.4.		
8. ORIGINATOR HRS-ROV SYSTEM ILS Technician	9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS		
10.1. FORMAT		
10.1.1. The Supplementary Provisioning Technical Documentation must be prepared in PDF format and in black and white line drawings.		
10.2. CONTENT		
10.2.1. The Supplementary Provisioning Technical Documentation (SPTD) must be provided for each item appearing on the Provisioning Documentation (para. 4.3), except for the Interim Spares List, as follows:		
10.2.1.1. The SPTD must consist of an Assembly drawing (see D-01-400-001/SG-000 section 7.4 for further details) with attached parts lists, so that DND can ensure that the Provisioning Documentation reflects the current and complete configuration of the equipment being produced.		
10.2.1.2. For item identification and cataloguing purposes, the technical data supplied for all Provisioning Documentation must be sufficiently comprehensive to allow DND to classify and fully describe the item within the NATO codification system and must be cross-referenced to the applicable contract number.		
10.3. ELECTRONIC FORMAT		
10.3.1. The SPTD as a PDF, must be submitted on CD or DVD media, and be labelled as follows:		
10.3.1.1. The project name: HRS-ROV;		
10.3.1.2. The contract number: W8476-175508		
10.3.1.3. The Subject Matter: SPTD;		
10.3.1.4. The DID number: HRS-ROV-ILS-205;		
10.3.1.5. The Revision number;		
10.3.1.6. The date of delivery.		

A4.11 DID – Special Tools and Test Equipment

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Special Tools and Test Equipment	2. IDENTIFICATION NUMBER DID HRS-ROV-ILS-206	
3. DESCRIPTION The Special Tools and Test Equipment provides a list of all special tools and testing equipment required to maintain and operate the HRS-ROV and train the personnel.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST HRS-ROV SYSTEM ILS Manager	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This Data Item Description (DID) contains the format, content and preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the ANNEX A. Para. 4.3.1.4.		
8. ORIGINATOR HRS-ROV SYSTEM ILS Technician	9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS		
10.1. CONTENT		
10.1.1. For each required item of STTE, provide:		
10.1.1.1. STTE Item Name;		
10.1.1.2. STTE Reference (Manufacturer's Part) Number;		
10.1.1.3. NSCM/CAGE Code;		
10.1.1.4. NSN (if available);		
10.1.1.5. Maintenance Level;		
10.1.1.6. Recommended Buy Quantity;		
10.1.1.7. Standard Unit Price;		
10.1.1.8. Date of First Article Delivery;		
10.1.1.9. Picture(s) or Drawing(s) of item; and,		
10.1.1.10. Description and Function of STTE		
10.1.2. The above list may be divided into sections as appropriate:		
10.1.2.1. Common Hand Tools;		
10.1.2.2. Special Purpose Tools;		
10.1.2.3. Operations Support Equipment;		
10.1.2.4. Maintenance Support Equipment;		
10.1.2.5. Calibration Equipment;		
10.1.2.6. Test, Measurement and Diagnostic Equipment (TMDE):		
10.1.2.6.1. General Purpose; and		
10.1.2.6.2. Special Purpose;		
10.1.2.7. Automatic Test Equipment (ATE) and its Test Program Set (TPS); and		
10.1.2.8. Computer Resources Support Requirement.		
10.2. Canada will select the STTE items based on analysis and recommendations presented by the Contractor at a time agreed to during the Kick-Off Meeting. This viewing must allow Canada to eliminate all STTE that, although being special to the equipment being purchased, may already be in the CF inventory.		
10.3. ELECTRONIC FORMAT		

- 10.3.1. The STTE data must be submitted in both Excel spreadsheet and PDF file format.
- 10.3.2. The STTE data must be submitted on CD or DVD media, and be labelled as follows:
 - 10.3.2.1. The project name: HRS-ROV;
 - 10.3.2.2. The contract number: W8476-175508
 - 10.3.2.3. The Subject Matter: Special Tools and Test Equipment;
 - 10.3.2.4. The DID number: HRS-ROV-ILS-206;
 - 10.3.2.5. The Revision number; and,
 - 10.3.2.6. The date of delivery.

A4.12 DID – Identification Plates

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Identification Plates	2. IDENTIFICATION NUMBER DID HRS-ROV-ILS-207	
3. DESCRIPTION The Identification Plates uniquely identify equipment and components and spares based on the procedures governing the identification marking of Canadian military property.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST HRS-ROV SYSTEM ILS Manager	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This Data Item Description (DID) contains the format, content and preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the ANNEX A. Para. 4.7 and D-02-002-001/SG-001 and D-01-400-002/SF-000.		
8. ORIGINATOR HRS-ROV SYSTEM ILS Technician	9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS		
<p>10.1. The following items must have Identification Plates attached to them prior to being delivered to DND for tracking and accountability within the Canadian Forces Supply System:</p> <ul style="list-style-type: none"> 10.1.1. Prime Equipment; 10.1.2. All Major Components; 10.1.3. Spares; 10.1.4. Training Equipment; 10.1.5. Transportation, Shipping, Storage Containers that are not single-use; 10.1.6. Support Equipment (excluding tools); and 10.1.7. Automatic Test Equipment <p>10.2. The Identification Plates affixed to each item listed in 10.1 must have the following data, deemed necessary by Canada , IAW D-02-002-001/SG-001, in both official languages of English and French:</p> <ul style="list-style-type: none"> 10.2.1. Item Name; 10.2.2. Reference (Manufacturer's Part) Number; 10.2.3. NCAGE code; 10.2.4. Serial Number; 10.2.5. Contract Number; and, 10.2.6. Government Ownership Designation. <p>10.3. Prior to the production and installation of the Identification Plates, representative Level 2 drawings (see D-01-400-002/SF-000) of each Identification Plate must be submitted to DND for review and acceptance as follows:</p> <ul style="list-style-type: none"> 10.3.1. In soft copy as described in 10.4 below; 10.3.2. In 1:1 scale hard copy, on white bond paper of standard North American size; and, 10.3.3. Must describe the mounting and installation method for each Identification Plate, with all fasteners described by size, technical standard and quantity. <p>10.4. ELECTRONIC FORMAT</p> <ul style="list-style-type: none"> 10.4.1. Viewing the PDF: pages, regardless of size, containing text and illustrations in landscape, must be rotated for electronic viewing and reading in landscape. 10.4.2. The Identification Plates drawings in PDF and its native file format must be submitted on CD or DVD media, and be labelled as follows: 		

- 10.4.2.1. The project name: HRS-ROV;
- 10.4.2.2. The contract number: W8476-175508
- 10.4.2.3. The Subject Matter: Identification Plates;
- 10.4.2.4. The DID number: HRS-ROV-ILS-207;
- 10.4.2.5. The Revision number;
- 10.4.2.6. The date of delivery.

A4.13 DID – Controlled Goods List

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Controlled Goods List	2. IDENTIFICATION NUMBER DID HRS-ROV-ILS-208	
3. DESCRIPTION The Controlled Goods List identifies if the end item, components and sub-components of the HRS-ROV that are specifically designed and modified for military purpose, and not spared as Controlled and Non-Controlled Goods to facilitate the production of Demilitarization Instructions. For items of US and Canadian origin, Demilitarization Code (DMC) will be provided in the form of a list.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST HRS-ROV SYSTEM ILS Manager	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This Data Item Description (DID) contains the format, content and preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the ANNEX A. Para. 4.8.		
8. ORIGINATOR HRS-ROV SYSTEM ILS Technician	9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS		
10.1. FORMAT		
10.1.1. The Controlled Goods list must be in a format of a MS Excel spreadsheet with 5 columns:		
10.1.1.1. Item name;		
10.1.1.2. Ref para for Canadian origin items (ECL);		
10.1.1.3. Ref para for US origin controlled goods (USML);		
10.1.1.4. Demilitarization Code (DMC)		
10.1.1.5. Remarks.		
10.2. CONTENT		
10.2.1. The Controlled Goods list must be filled in the spreadsheet accordingly with the following instructions:		
10.2.1.1. For Canadian origin items, Canada's Export Control List (ECL) articles that apply in accordance with the Defence Product Act (DPA);		
10.2.1.2. For US origin dual use, the Export Control Classification Number (ECCN) of the Commerce Control List that applies;		
10.2.1.3. For US origin controlled goods also known as defence articles, the United States Munitions List (USML) Category and paragraph that apply in accordance with the International Traffic in Arms Regulations (ITAR);and		
10.2.1.4. For all other countries other than Canada and the USA, the category and article of the Wassenaar Control List that applies.		
10.3. ELECTRONIC FORMAT		
10.3.1. The Controlled Goods List must be submitted on CD or DVD media, and be labelled as follows:		
10.3.1.1. The project name: HRS-ROV;		
10.3.1.2. The contract number: W8476-175508		
10.3.1.3. The Subject Matter: Controlled Goods List;		
10.3.1.4. The DID number: HRS-ROV-ILS-208;		
10.3.1.5. The Revision number;		
10.3.1.6. The date of delivery.		

A4.14 DID – Packaging, Labels and Codes

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Packaging, Labels and Codes	2. IDENTIFICATION NUMBER DID HRS-ROV-ILS-209	
3. DESCRIPTION The Packaging, Labels and Codes ensures that the labelling used to identify packages for items procured by DND and shipped to and stored at a Canadian facility comply with CF Specifications and to obtain a complete record of packaging codes for catalogued items of the HRS-ROV.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST HRS-ROV SYSTEM ILS Manager	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This Data Item Description (DID) contains the format, content and preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the ANNEX A. Para. 4.10 and: <ul style="list-style-type: none"> • D-LM-008-011/SF-001: Preparation and Use of Packaging Requirements Codes, 1988-11-10; • D-LM-008-002/SF-001: Specification for Marking for Storage and Shipment, 1991-08-01; • D-01-400-002/SF-000: Levels of Engineering Drawings and Associated Lists, 2011-03-01. 		
8. ORIGINATOR HRS-ROV SYSTEM ILS Technician	9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS <p>10.1. The design, populated with the appropriate data, of each Packaging Label must be provided as Level 1 engineering drawings (as defined in D-01-400-002/SF-000) dimensioned to show the measurements as defined by D-LM-008-002/SF-001 (example: text size, bar code dimensions).</p> <p>10.2. The Packaging Codes prepared from D-LM-008-011/SF-001 for the Packaging Labels for each item must be compiled into a spreadsheet containing the following columns of data, titled as below:</p> <ul style="list-style-type: none"> 10.2.1. Item Name – as given by the Contractor; 10.2.2. Manufacturer’s Reference Number (MRN) – Source manufacturer’s part number; 10.2.3. NCAGE – Source Manufacturer’s NCAGE; 10.2.4. OEM part number – Part number assigned by Contractor; 10.2.5. NATO Nomenclature – Item name as assigned by NATO; 10.2.6. NATO Stock Number; 10.2.7. Packaging Code – as resolved by the Contractor; 10.2.8. Label Number – cross-referenced with the label drawing number from 10.1 above. <p>10.3. DELIVERY FORMAT</p> <p>10.3.1. Hard Copy: must be on letter, legal, or 11” x 17” white bond paper, as appropriate for good legibility.</p> <p>10.3.2. Soft Copy:</p> <ul style="list-style-type: none"> 10.3.2.1. Label Drawings: as text-searchable PDF files, rotated as appropriate to permit normal viewing on-screen. 10.3.2.2. Packaging Codes spreadsheet: <ul style="list-style-type: none"> 10.3.2.2.1. As a text-searchable PDF file, rotated as appropriate to permit normal viewing on-screen; and, 10.3.2.2.2. As a MS Excel format spreadsheet. 10.3.2.3. All files must be submitted on CD or DVD media, and be labelled as follows: <ul style="list-style-type: none"> 10.3.2.3.1. The project name: HRS-ROV; 10.3.2.3.2. The contract number: W8476-175508 		

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| 10.3.2.3.3. | The Subject Matter: Packaging Labels and Codes; |
| 10.3.2.3.4. | The DID number: HRS-ROV-ILS-209; |
| 10.3.2.3.5. | The Revision number; |
| 10.3.2.3.6. | The date of delivery. |

A4.15 DID – Repair and Overhaul Plan

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Repair and Overhaul Plan	2. IDENTIFICATION NUMBER DID HRS-ROV-ILS-210	
3. DESCRIPTION The Repair and Overhaul Plan (R&O Plan) provides R&O planning information for the HRS-ROV once it's in-service and is sent back for repairs.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST HRS-ROV SYSTEM ILS Manager	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This Data Item Description (DID) contains the format, content and preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the ANNEX A. Para. 4.11.		
8. ORIGINATOR HRS-ROV SYSTEM ILS Technician	9. APPLICABLE FORMS	
<p>10. PREPARATION INSTRUCTIONS</p> <p>10.1. FORMAT</p> <p style="padding-left: 20px;">10.1.1. The R&O plan must be in a format of a MS Excel spreadsheet.</p> <p>10.2. CONTENT</p> <p style="padding-left: 20px;">10.2.1. The contractor must fill in the spreadsheet accordingly with the following instructions:</p> <p style="padding-left: 40px;">10.2.1.1. Item Number (unique sequence no. for each list);</p> <p style="padding-left: 40px;">10.2.1.2. Item Name;</p> <p style="padding-left: 40px;">10.2.1.3. Reference (Manufacturer's Part) number;</p> <p style="padding-left: 40px;">10.2.1.4. NSCM/CAGE Code;</p> <p style="padding-left: 40px;">10.2.1.5. NATO Stock Number (if available);</p> <p style="padding-left: 40px;">10.2.1.6. Wear out Life;</p> <p style="padding-left: 40px;">10.2.1.7. Designated Rework Point.</p> <p>10.3. For each item requiring Repair and Overhaul, provide a Technical Data List identifying the technical data needed by the Repair and Overhaul facility. These data may consist of, for example, overhaul task descriptions, repair schemes, test procedures and modifications to be incorporated.</p> <p>10.4. ELECTRONIC FORMAT</p> <p style="padding-left: 20px;">10.4.1. The Repair and Overhaul Plan must be submitted on CD or DVD media, and be labelled as follows:</p> <p style="padding-left: 40px;">10.4.1.1. The project name: HRS-ROV;</p> <p style="padding-left: 40px;">10.4.1.2. The contract number: W8476-175508</p> <p style="padding-left: 40px;">10.4.1.3. The Subject Matter: Repair and Overhaul Plan;</p> <p style="padding-left: 40px;">10.4.1.4. The DID number: HRS-ROV-ILS-210;</p> <p style="padding-left: 40px;">10.4.1.5. The Revision number;</p> <p style="padding-left: 40px;">10.4.1.6. The date of delivery.</p>		

A4.16 DID – Repair Manual

DATA ITEM DESCRIPTION		
1. TITLE Repair Manual	2. IDENTIFICATION NUMBER HRS-ROV-ILS-211	
3. DESCRIPTION The Repair Manual contains all the information required by the maintainer to perform preventative and corrective maintenance procedures and troubleshooting of the equipment and must be broken into two (2) manuals: Large and Small ROV.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST HRS-ROV SYSTEM ILS Manager	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This DID contains the format, content and preparation instructions for the Repair Manual as required by Annex A of the SOW, Para 4.2.1.3 ; and <ul style="list-style-type: none"> • D-01-100-204/SF-000 <i>Specification for Preparation of Preventive Maintenance Instructions</i>; • D-01-100-205/SF-000 <i>Specification for Preparation of Corrective Maintenance Instruction</i>; • C-01-100-100/AG-005 <i>Acceptance of Commercial and Foreign Government Publications as Adopted Publications</i> 		
8. ORIGINATOR HRS-ROV SYSTEM ILS Technician	9. APPLICABLE FORMS N/A	
10 PREPARATION INSTRUCTIONS		
10.1 FORMAT		
10.1.1 The Repair Manual must be prepared in the Contractor's format and be in full conformance with the current issue of C-01-100-100/AG-005, D-01-100-204/SF-000 and D-01-100-205/SF-000.		
10.1.2 The National Defence Identification Number (NDID), provided to the Contractor by DND, must be placed on the top right corner of all the pages of the manual.		
10.1.3 The accepted Repair Manual hard copies must be:		
10.1.3.1 Furnished with resistant flexible covers;		
10.1.3.2 Printed on paper with these characteristics:		
10.1.3.2.1 Weight: at least 90g/m ² ; and,		
10.1.3.2.2 Brightness: at least 96; and,		
10.1.3.3 Bound in a manner that will allow the manual to remain open while on a flat surface at all pages without pages flipping over inadvertently.		
10.2 CONTENT		
10.2.1 The Repair Manual must provide descriptive essential, preventive and corrective maintenance information on all components, groups of equipment and systems IAW the Maintenance Concept, Annex A. Para. 4.1, must cover the following topics, and others judged pertinent by the Contractor:		
10.2.1.1 System Equipment overview;		
10.2.1.2 Pre-use testing/inspection;		
10.2.1.3 Use and operation for maintenance purposes;		
10.2.1.4 Troubleshooting and fault finding;		
10.2.1.5 Preventive and Corrective maintenance procedures;		
10.2.1.6 Special tools and test equipment;		
10.2.1.7 Safety – personnel, equipment safety issues and hazardous material issues; and		
10.2.1.8 Practical maintenance training.		
10.2.2 The Repair Manual text must be amplified by comprehensive system or component illustration, good		

quality color pictures, pictograms and schematics.

10.2.3 Products Containing Mercury (if applicable)

10.2.3.1 The Repair Manual must include information on part numbers containing mercury, location, type of mercury, manufacturer's information, mercury content, and MSDS information.

10.2.3.2 The Repair Manual must include a written work procedure for processes involving the safe handling of mercury-containing equipment, components and materials.

10.2.3.3 The Repair Manual must identify procedures for mercury spills clean-ups and disposal procedures. The work procedure must identify proper Personal Protective Equipment (PPE) in the case of a spill.

10.3 ELECTRONIC FORMAT

10.3.1 The Repair Manual electronic format must meet the following:

10.3.1.1 Be a PDF file and MS Word file that matches the printed publication's format and layout. Links, bookmarks, and thumbnails are to be included in files.

10.3.1.2 All references made to a specific paragraph, figure, appendix must be appropriately linked.

10.3.1.3 Viewing the PDF and MS Word: pages, regardless of size, containing text and illustrations in landscape, must be rotated for electronic viewing and reading in landscape.

10.3.2 The Repair Manual, in PDF, MS Word and in its native file format, must be submitted on CD or DVD media, and be labelled as follows:

10.3.2.1 The project name: HRS-ROV;

10.3.2.2 The contract number: W8476-175508

10.3.2.3 The Subject Matter: (Large ROV System or Small ROV System) Repair Manual;

10.3.2.4 The DID number: HRS-ROV-ILS-211;

10.3.2.5 The Revision number; and,

10.3.2.6 The date of delivery.

A4.17 DID – Quick Reference Cards

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Quick Reference Cards	2. IDENTIFICATION NUMBER HRS-ROV-ILS-212	
3. DESCRIPTION Quick Reference Cards (QRC) will allow the trained HRS-ROV user to quickly unpack, assemble, and safely use the HRS-ROV system.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST HRS-ROV SYSTEM ILS Manager	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This DID contains the format, content and preparation instructions for the Quick Reference Cards as required by SOW Annex A. Para 4.2.1.4.1 and DID HRS-ROV-ILS-201 Operator Manual , and C-01-100-100/AG-006 Writing, Format and Production of Technical Publications		
8. ORIGINATOR HRS-ROV System ILS Technician	9. APPLICABLE FORMS N/A	
10. PREPARATION INSTRUCTIONS 10.1. FORMAT The accepted QRC must be provided to the HRS-ROV user as follows: 10.1.1. Containing no more than 4 sheets; 10.1.2. Laminated for protection; 10.1.3. Be of dimensions that allow the QRC to be packed in the HRS-ROV's carry case (see Appendix A1.0 & A2.0) without being folded or otherwise distorted from flat; 10.1.4. If multiple pages are required, they are to be firmly bound together using corrosion-proof hardware so that the QRC remains open at the desired page when laid on a flat horizontal surface; and, 10.1.5. Produced and printed exclusively in black and white. 10.2. CONTENT 10.2.1 The QRC must contain the necessary instructions to allow a trained user to quickly, safely and effectively operate the HRS-ROV. 10.2.2 The QRC must assume that the HRS-ROV's initial state is: packed in its carry case (see Appendix A1.0 and A2.0). 10.2.3 The instructions must be based on pictograms illustrating the sequence of steps required while using only minimal text to assist in the understanding of the document. Desired look and feel would be similar to commercial airline safety pamphlets describing the use of oxygen masks, emergency exits. 10.2.4 The QRC must not introduce new information and procedures relative to the <i>Operator Manual</i> : the <i>Operator Manual</i> is the master document on how to use the HRS-ROV. 10.2.5 The QRC must contain, ahead of its main content, a cautionary advisory formatted as shown in Figure 2-1-3 of C-01-100-100/AG-006. 10.2.5.1 The cautionary advisory's heading must be determined based on the criteria set out in Part 4, Section 2, Para 8 of C-01-100-100/AG-006. 10.2.5.2 The cautionary advisory must read as follows: "This Quick Reference Card is intended solely for experienced users who have been trained on this equipment, and have read and understood its Operator Manual (CFTO# to be supplied by DND). When in doubt, read the Operator Manual before operating this equipment." The cautionary advisory must also have, immediately following this text, a brief description of the consequences of misuse of the equipment, linked to the same criteria listed in 10.2.5.1 above.		

10.3 ELECTRONIC FORMAT

The QQRc must be submitted in PDF and native file format (if other than PDF) on CD or DVD media, and be labelled as follows:

- 10.3.1 The project name: HRS-ROV;
- 10.3.2 The contract number: W8476-175508
- 10.3.3 The DID number: HRS-ROV-ILS-212;
- 10.3.4 The Subject Matter: *Operator Quick Reference Cards*;
- 10.3.5 The Revision number; and,
- 10.3.6 The date of delivery.

A4.18 DID – Top Level Assembly Drawing

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Top Level Assembly Drawing	2. IDENTIFICATION NUMBER HRS-ROV-ILS-213	
3. DESCRIPTION Top Level Assembly Drawings define the assembled relationship of all the parts of the HRS-ROV System.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST HRS-ROV SYSTEM ILS Manager	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This DID contains the format, content and preparation instructions for the Top Level Assembly Drawing as required by SOW Annex A. Para 3.3.2.2.1 and D-01-400-001/SG-000, Engineering Drawing Practices; D-01-400-002/SF-000: Levels of Engineering Drawings and Associated Lists.		
8. ORIGINATOR HRS-ROV System ILS Technician	9. APPLICABLE FORMS N/A	
10. PREPARATION INSTRUCTIONS 10.1. FORMAT 10.1.1. The Top Level Assembly Drawing must be prepared IAW D-01-400-001/SG-000, Engineering Drawing Practices, para 7.4 and D-01-400-002/SF-000: Levels of Engineering Drawings and Associated Lists, para 3.3.2. 10.2. CONTENT 10.2.1. The Top Level Assembly Drawing must contain all information necessary to define the relationship between all the components of the HRS ROV System in order for DND to initiate cataloging of the complete system. 10.3. DELIVERY FORMAT 10.3.1. Hard Copy: must be on 11" x 17" white bond paper, for good legibility. 10.3.2. Electronic Format 10.3.2.1. The Top Level Assembly Drawing must be submitted in a PDF file, which matches the printed format and layout. 10.3.2.2. Viewing the PDF version: pages, regardless of size, containing text and illustrations in landscape, must be rotated for electronic viewing and reading in landscape. 10.3.2.3. The Top Level Assembly Drawings must be submitted on CD or DVD media, and be labelled as follows: 10.3.2.3.1. The project name: HRS-ROV; 10.3.2.3.2. The contract number: W8476-175508 10.3.2.3.3. The Subject Matter: Top Level Assembly Drawings; 10.3.2.3.4. The DID number: HRS-ROV-ILS-213; 10.3.2.3.5. The Revision number; and, 10.3.2.3.6. The date of delivery.		

A4.19 DID – Decals and Data Plates

DATA ITEM DESCRIPTION		
1. TITLE Decals and Data Plates	2. IDENTIFICATION NUMBER HRS-ROV-ILS-214	
3. DESCRIPTION The Decals and Data Plates for HRS-ROV will fully show all signs, decals and markings used on the HRS-ROV System.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST HRS-ROV SYSTEM ILS Manager	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This DID contains the format, content and preparation instructions for the Decals and Data Plates required by Annex A SOW, paragraph 4.9.4 using D-01-400-001/SG-000, Engineering Drawing Practices; D-01-400-002/SF-000: Levels of Engineering Drawings and Associated Lists, with the modifications listed below.		
8. ORIGINATOR HRS-ROV SYSTEM ILS Technician	9. APPLICABLE FORMS N/A	
10 PREPARATION INSTRUCTIONS 10.1 FORMAT 10.1.1 The Decal and Data Plate drawings must be prepared in PDF format while being in compliance with D-01-400-001/SG-000 and D-01-400-002/SF-000 and produced on 11”X17” paper size for clarity. 10.2 CONTENT 10.2.1 The Decals and Data Plates drawings must show and cover the following: 10.2.1.1 Dimensions; 10.2.1.1.1 Width and Length; 10.2.1.1.2 Thickness; 10.2.1.1.3 Size of Lettering in mm. 10.2.1.2 Method of Affixing; 10.2.1.3 Location of decal on Equipment; 10.2.1.4 Colour Scheme; 10.2.1.5 Workmanship; 10.2.1.5.1 Type of Lettering; 10.2.1.5.2 Proposed Markings; 10.2.1.5.3 Type and Size of fonts. 10.2.1.6 Materiel, Finish and Protective Coating 10.3 ELECTRONIC FORMAT 10.3.1 The Decals and Data Plates must be provided as a PDF file with searchable text that matches the printed drawing’s format and layout. Links, bookmarks and thumbnails are to be included in the PDF file. All references made to a specific paragraph, figure, and appendix must be appropriately linked. 10.3.2 Viewing the PDF: pages, regardless of size, containing text and illustrations in landscape, must be rotated for electronic viewing and reading in landscape. 10.3.3 The Decals and Data Plates PDF and its native file must be submitted on CD or DVD media, and be labelled as follows: 10.3.3.1 The Project name: HRS-ROV; 10.3.3.2 The Contract number: W8476-175508;		

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| 10.3.3.3 | The Subject Matter: Decals and Data Plates; |
| 10.3.3.4 | The DID number: HRS-ROV-ILS-214; |
| 10.3.3.5 | The Revision number; and, |
| 10.3.3.6 | The Date of delivery. |

A4.20 DID – Application for Spectrum Supportability

DATA ITEM DESCRIPTION		
DND Form 1409		
1. TITLE Application for Spectrum Supportability	2. IDENTIFICATION NUMBER HRS-ROV-ILS-215	
3. DESCRIPTION This Application for Spectrum Supportability document (DND form 552) describes the general wireless equipment usage as well as the transmitter, antenna and receiver equipment characteristics of the system that is provided.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DND/DGLEPM/DCSEM 9	6. GIDEP APPLICABLE N/A
7. APPLICATION/INTERRELATIONSHIP This DID contains the format, content and preparation instructions for the Application for Spectrum Supportability as required by Annex A SOW. Para. 4.12.		
8. ORIGINATOR HRS-ROV System Technical Authority	9. APPLICABLE FORMS N/A	
10. PREPARATION INSTRUCTIONS		
10.1. DETAILED REQUIREMENTS		
10.1.1. The Application for Spectrum Supportability must be completed and provided in accordance with the requirements as outlined in ANNEX D Application for Spectrum Supportability of this Contract.		
10.1.2. The following sections must be completed:		
10.1.2.1. Part 1, Block 1 – Equipment Nomenclature and/or Model Number;		
10.1.2.2. Part 2 – Transmitter Equipment Characteristics;		
10.1.2.3. Part 3 – Receiver Equipment Characteristics, and		
10.1.2.4. Part 4 – Antenna Equipment Characteristics.		
10.1.3. The values entered on the DND 552 forms must be measured values.		
10.1.4. Where equipment is developmental, specified values may be substituted for measured values, and so indicated on the forms. If the proposed equipment is in use by the United States military it may already have a US Department of Defence (DoD) Form 1494. If available, a DoD 1494 form will be accepted by DND in lieu of a DND 552.		

Estimated Cost Table – As per the HRS-ROV Statement of Work

W8476-175508

Item	Item Description	Qty	Estimated Cost (CAD)
1	HRS-ROV – Small ROV System (para. A1.0)	79	
2	HRS-ROV – Large ROV System (para. A2.0)	9	
3	Project Management Plan (para. 3.2)	LOT	
4A	Kick-off & ILS Meeting (para. 3.3.2 & 3.3.3)	1	
4B	Meeting Agenda (para. 3.3.5.1.1)	LOT	
4C	Meeting Minutes (para. 3.3.5.1.2)	LOT	
5	Operator Manuals (para. 4.2.1.1)	LOT	
6	Initial Training Package (para. 4.2.1.2)	LOT	
7	Illustrated Parts Manual (para. 4.3.1.1)	LOT	
8	Provisioning Parts Breakdown (para. 4.3.1.2)	LOT	
9	Supplementary Provisioning Technical Documentation (para. 4.3.1.3)	LOT	
10A	Special Tool & Testing Equipment (para. 4.3.1.4)	LOT	
10B	Option to acquire Special Tool & Testing Equipment after approval from DND	N/A	N/A See below
11A	Initial Provisioning Guidance Conference (para. 4.4)	1	
11B	Meeting Agenda (para. 3.3.5.1.1)	LOT	
11C	Meeting Minutes (para. 3.3.5.1.2)	LOT	
12A	Initial Provisioning Conference (para. 4.5)	1	
12B	Meeting Agenda (para. 3.3.5.1.1)	LOT	
12C	Meeting Minutes (para. 3.3.5.1.2)	LOT	
13	Option to acquire Spare Parts after approval from DND (this will occur after the IPC)	N/A	N/A See below
14	Identification Plates (para. 4.7)	LOT	
15	Controlled Goods List (para. 4.8)	LOT	
16	Packaging, Labels and Codes (para. 4.10)	LOT	
17	Repair & Overhaul Plan (para. 4.11)	LOT	
18	Top Level Assembly Drawings (para. 3.3.2.2.1)	LOT	
19	Repair Manual (para. 4.2.1.3)	LOT	
20	Decals and Data Plates (para. 4.9.4)	LOT	
21	Quick Reference Cards (para. 4.2.1.4)	LOT	
22	Application for Spectrum Supportability (para. 4.12)	LOT	
Spare Parts for two (2) years of usage - assume 150 hours of use on each ROV system over the two years, and user maintenance follows the Maintenance Concept para. 4.1, supported by Contractor R&O which should not be costed here.			
Training Sessions – Operator – Five (5) training sessions (course length of 2 days each) to be done at the following Canadian Forces Bases:	CFB Edmonton		
	CFB Petawawa		
	CFB Valcartier		
	CFB Gagetown (2 courses)		

Training Sessions – Technician – Five (5) training sessions (course length of 2 days each) to be done at the following Canadian Forces Bases:	CFB Edmonton	
	CFB Petawawa	
	CFB Valcartier	
	CFB Gagetown (2 courses)	
Total Estimated Cost		

- **Note:** ‘LOT’ equates to the quantity needed to fulfill the requirements of the CDRL and revisions, until accepted by DND.
- **Note:** Interim Spares cost and Special Tool & Testing Equipment costs are not needed.